**"Study of emotional profile of first-time whole blood donors and the impact of emotional trajectories over feedback for donor return"**

Thesis submitted to

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES, BHOPAL**

For the award of the degree of MD in the subject of

**TRANSFUSION MEDICINE AND BLOOD BANK**

By

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Under the guidance of

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**JANUARY 2021**

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES, BHOPAL**
**Institutional Human Ethics Committee**

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The Dean (Academics),
IHEC-PGR, AIIMS Bhopal

**Subject: Submission of Thesis**

Respected Sir,

I, **Dr Rut Naik**, had joined the Department of Transfusion Medicine and Blood Bank at AIIMS Bhopal as a postgraduate student on **02/02/2021**. I am hereby submitting soft copy of my Thesis titled as "**Study of emotional profile of first-time whole blood donors and the impact of emotional trajectories over feedback for donor return**" for your kind approval please.

Thanking you.
Yours sincerely

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I hereby declare that the thesis titled "**Study of emotional profile of first time whole blood donors and the impact of emotional trajectories over feedback for donor return.**" is a bonafide and original work carried out by me under the supervision and guidance of **Dr Vilasini Patil**, Assistant Professor, Department of Transfusion Medicine & Blood Bank and Co-guide **Dr Romesh Jain**, Assistant Professor, Department of Transfusion Medicine & Blood Bank, **Mr. Mohit Kumar,** clinical psychologist, Department of Psychiatry. The thesis or any part thereof has not formed the basis for the award of any degree/ fellowship or similar title to any candidate of any University to the best of my knowledge.

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**Institutional Human Ethics Committee- PostGraduate Research (IHEC-PGR)**

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**Ref Number:** IHEC-PGR/2021/PG/Jan (Jul)/01 **Date:** 30th March 2022

## Letter of Permission

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AIIMS, Bhopal Institutional Human Ethics Committee- Post Graduate Research (IHEC-PGR) has discussed your proposal titled **"Study of emotional profile of first time whole blood donors and the impact of emotional trajectories over feedback for donor return"** and evaluated it for suitability for your dissertation as required for fulfilment of MD/MS program.

**The decision of the committee is as follows:**

The AIIMS, Bhopal IHEC-PGR approves your research protocol. All research related activities must begin only after the date of this approval. The validity of this approval is till two years from the date of issuance. Please submit a closure report / renewal request before expiration of the validity for this approval.

Shashank Purwar

**Dr. Shashank Purwar**
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|---|---|
| **Analyzed document** | Rut Naik thesis.docx (D171440487) |
| **Submitted** | 2023-06-28 12:52:00 |
| **Submitted by** | Saurabh Vishwakarma |
| **Submitter email** | saurabh.library@aiimsbhopal.edu.in |
| **Similarity** | 2% |
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## Sources included in the report

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Document CA2_Lab Report_Adriana Akamine_10595661.docx (D158419899)

SA **ca2 ethics (1).docx** 1
Document ca2 ethics (1).docx (D127797616)

## Entire Document

TITLE: STUDY OF THE EMOTIONAL PROFILE OF FIRST-TIME WHOLE BLOOD DONORS AND THE IMPACT OF EMOTIONAL TRAJECTORIES OVER THE FEEDBACK FOR DONOR RETURN

INTRODUCTION

Blood is often called the "fluid for life" as it is vital in numerous medical procedures, including hematology, significant surgeries, obstetrics, trauma-related cases, and pediatric transfusions. Ensuring a continuous and sufficient blood supply is essential to meet the increasing demand for blood.

**Acknowledgements:**

I am grateful to almighty for providing me opportunity to learn.

I am grateful to my father Dr. Hasmukh K. Naik and my family for inspiring me to persevere.

I would like to thank my thesis guide Dr. Vilasini Patil (Assistant Professor) supported in thick and thins throughout thesis starting from topic selection to atrocities of submission process. She is a great mentor and guide in a true sense. I am also grateful to co-guides Dr. Romesh Jain (Assistant Professor) and Mr. Mohit Kumar (Clinical Psychologist) for their regular support and making this topic possible.

I would like to thank our Head of the Department and Dean (Acad) Prof. (Dr) Rajesh Malik Sir for giving me this opportunity.

Many thanks to Dr. Pratul Sinha (Additional Professor) for guiding with topic selection and making terminologies crystal clear.

I am thankful to my immediate seniors, my family at AIIMS- Dr. Snehashish Mishra and Dr. Vikrant Sharma for tremendous assistance during data collection process and managing work at the same time.

Special thanks to Ms. Lisa Williams for guiding me for tool selection and Dr. Aviraj, for helping with statistical methods, Dr. Sravan, Dr. Sana, Dr. Devesh, Dr. Rishi, my batchmates, my juniors and Mr. Prateek for support.

Finally, thank you to the team of nursing officers Ms. Selma, Ms. Sangeeta, Mr. Ramesh, Mr. Fusaram, Mr. Dinesh, Ms. Reenu, Mr. Ravindra, Ms. Asha, Mr. Amit to assist in data collection during phlebotomy.

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**Abbreviations:**

- **VNRBD- voluntary non-remunerated blood donor**
- **TPB- Theory of Planned behavior**
- **VVR-Vasovagal Reactions**
- **PANAS- Positive And Negative Affect Schedule**
- **ROC curve- Receiver Operating Characteristic curve**
- **SPSS- Statistical Package for Social Sciences**
- **T1: Time point 1(pre-donation area or waiting area)**
- **T2: Time point 2(during donation area or phlebotomy area)**
- **T3: Time point 3(post-donation area or Refreshment area)**

## INTRODUCTION

Blood is often called the "fluid for life" as it is vital in numerous medical procedures, including hematology, significant surgeries, obstetrics, trauma-related cases, and pediatric transfusions. Ensuring a continuous and sufficient blood supply is essential to meet the increasing demand for blood.

A national-level cross-sectional study conducted by Mammen et al. revealed a significant demand-supply gap, with approximately 2.5 donations per 1000 eligible individuals, equivalent to nearly one million units of blood (1). This highlights the urgent need to improve measures for maintaining a continuous and adequate blood supply.

Several factors contribute to the reduction in eligible blood donors, placing strain on the current blood supply. These factors include donor reactions, misconceptions, lack of awareness about voluntary donation, fear of needles, laziness, fear of fainting, fear of discovering the illness, fear of looking at blood, and lack of time (2)(3).

While many high-income countries rely on voluntary blood donation to meet the majority of blood demands, India still relies on a combination of voluntary, replacement, and family donors to address the high demand. According to the 2016 annual reports, 80.5% of donations in NACO-supported blood banks in India were from voluntary donors, while 19.5% were replacement donations (4)(5)

Repeat non-remunerated voluntary donors (VNRBD) are considered the safest group of blood donors (6). They offer several advantages over other donor groups, including a lower risk of

transmitting infections than replacement donors. However, recruiting new voluntary donors presents its challenges.

Given the importance of maintaining a pool of repeat voluntary non-remunerated blood donors, research is focused on strategies to convert first-time donors into regular donors to ensure a safe and steady blood supply. Many donors donate only once and do not return for subsequent donations (7). It is critical to understand the reasons behind their lack of return, find ways to make donors feel more comfortable, and develop a "habit" of blood donation in a healthy way.

Previous research has explored various organizational, sociodemographic, physiological, and psychological factors influencing individuals' willingness to donate blood (8). Psychological factors, in particular, have been found to play a significant role in explaining, predicting, and promoting blood donation behavior (7)(9).

Emotions are crucial in the context of blood donation, which differs from typical commercial transactions. Unlike monetary exchanges, where individuals receive tangible products or services, blood donation involves a unique exchange form. While donors do not receive a direct material benefit, they perceive various non-material benefits such as social status, recognition within their community, emotional satisfaction, and potentially other unexplored factors (10).

Studies have examined the role of altruism in blood donation. While it was initially believed to be the primary motivation for donors, studies by Ferguson and colleagues have revealed that blood donors also experience personal benefits and a sense of benevolence through their donation (11). Considering these factors is also essential when designing strategies to encourage donor retention in the future.

Previous studies on emotions in the context of blood donation have indicated that stress levels tend to decrease as the donation process unfolds, while positive emotions tend to increase. However, there is still a need for a more detailed understanding of the specific positive or negative emotions that can influence donor return. Therefore, it is essential to consider these emotions carefully when formulating strategies to promote donor retention.

Thus, the present study aims to investigate the emotional experiences of first-time blood donors throughout the blood donation process, identify the specific emotions that donors experience at different stages of the donation process, and determine which emotions either undermine the likelihood of return or appear to motivate return. By understanding the emotional profiles of blood donors, we can create interventions and recruitment strategies that enhance positive emotions and minimize negative emotions, ultimately increasing donor return rates.

## REVIEW OF LITERATURE:

Tools used for literature search: Google Scholar and Pub Med

**Literature related to the significance of blood donor retention and strategies available (significance of return):**

Managing the blood bank inventory is of utmost importance to maintain a sufficient supply for transfusion of various blood components. Many strategies are developed to achieve a safe and constant pool of blood donors, focusing on retaining donors who donate once.

Over a 6-year follow-up period beginning 12 months after their initial donation in a retrospective study by Schreiber GB, a substantial number of first-time blood donors in 1991 (61.5%) did not participate in subsequent donations. Among those who did return to donate, 25.5% did so for either 1 or 2 years out of the 6-year period, while a smaller proportion (5.3%) donated for 3 years. Remarkably, only 7.7% of the donors exhibited strong commitment by continuing to donate for four or more years during the 6-year follow-up period. These findings highlight the challenges in achieving sustained donor engagement and retention, with most first-time donors failing to establish long-term donation habits. (12)

According to a study, the youngest age group of blood donors demonstrated the highest return rate, with 62% returning over a 13-month period and 71% over a 25-month period. Interestingly, the return rate initially drops to its lowest values (28% and 34%) at 19 years old and then steadily increases. It is essential to address challenges associated with first-time donors, including ensuring a positive donation experience, meeting physical eligibility criteria, and closely monitoring for any signs of adverse reactions. (13)

These findings support the suggestion provided in the previous study by H.E.Ownby that first-time donors should be encouraged to donate again as soon as they are eligible to be converted to regular donors. Frequent contact with donors until they develop a pattern of making multiple donations, may be essential for influencing first-time donors to donate regularly. (14)

The findings of a study conducted in Zimbabwe align with previous research, indicating that first-time donors are more likely to transition into regular donors in the initial stages of their blood donation journey. However, as time progresses, donor attrition rates tend to rise while donor retention rates decline. (15)

Several strategies for donor retention have been implemented, and ongoing efforts continue to identify additional approaches. A study by Amit Agrawal demonstrated the effectiveness of tele recruitment as a strategy to retain blood donors. (16)

Creating a welcoming environment by greeting donors with a warm smile and positive attitude and expressing gratitude with a simple "Thank you" as they leave the blood center after donation can significantly enhance donor retention. (17)

Various interventions have been proposed and studied over a span of 20 years to improve blood donor retention:

- Offering nonmonetary incentives to donors has shown promise in enhancing retention rates. (18)
- Sending reminders to donors after their first donation has been effective in encouraging repeat donations. (16)

- Providing positive feedback and compliments to donors for their altruistic act of blood donation has been identified as a potential strategy for retention. (19)
- Engaging donors by requesting them to complete questionnaires or surveys has been explored as a means to maintain their connection and commitment. (20)
- Techniques such as applied muscle tension, salt water loading, and distraction during the donation process have been suggested to minimize donor reactions and improve overall retention. (21)

These interventions demonstrate the diverse approaches that can be employed to enhance donor retention in blood donation programs.

According to a review article, incorporating donor suggestions into blood donation practices has shown positive outcomes in terms of donor motivation, recruitment, and retention. The following interventions have been observed to be effective(22):

- Displaying Information, Education, and Communication (IEC) materials in the waiting area to provide donors with relevant information.
- Implementing an online portal for convenient registration and scheduling of donation appointments.
- Having donor counsellors with multilingual skills to cater to diverse donor populations.
- Ensuring that donors experience physical, emotional, and psychological satisfaction during the donation process.
- Offering audio-visual tools as distractions to reduce donor reactions during the procedure.
- Valuing donor opinions and actively implementing their suggestions.
- Promoting a pleasant and respectful behaviour by the phlebotomy staff throughout the donation process.

- Using non-adhesive medical bandages instead of large bandages for post-donation care.
- Regularly seeking feedback from donors, implementing their suggestions, and notifying them about the changes made based on their feedback.

These interventions demonstrate the significance of incorporating donor suggestions in improving donor motivation, recruitment, and retention in blood donation programs.

In a study by Bendall and Bove et al., various motivations for blood donation were identified, including(8) :

- Financial incentives or the motivation to receive monetary compensation.
- Collectivism, referring to the desire to donate blood to support friends and family.
- Blood drives, which serve as events or campaigns that encourage blood donation.
- Recognition, where individuals may be motivated by the acknowledgment and appreciation received for their donation.
- Donation prompted by catastrophic events, such as natural disasters or emergencies, which increase the urgency and importance of donating.
- Advertising efforts that raise awareness and promote the importance of blood donation.
- Descriptive norms, where individuals are influenced by social norms and the behaviour of others in their decision to donate.

These motivations highlight the diverse factors that influence individuals' willingness to donate blood, including financial, social, and emotional considerations, as well as the impact of external influences such as advertising and social norms.

In a study on blood and organ donation conducted by E. Ferguson, it was found that the motivations of blood donors are not solely altruistic. Instead, donors who engage in altruism can be categorized into two groups:

- Warm-glow givers: These donors experience positive emotions and a sense of personal satisfaction, known as "warm-glow," when they help others. They donate blood to earn this positive affect.
- Reluctant altruists: These donors contribute because they have a lack of trust in others to fulfil their responsibility to donate. They are more likely to donate when they perceive others as acting unfairly by not donating blood themselves.(23)

In a longitudinal follow-up study conducted by Christopher R. France et al., it was proposed that donor satisfaction with the blood donation process plays a crucial role in determining their intention to donate again. The study aimed to assess the impact of an intervention targeting syncopal reactions on novice donors. The researchers hypothesized that donor satisfaction would be negatively influenced by experiences of anxiety, pain, and syncopal symptoms. They further predicted that satisfaction would directly affect donation intention, and that anxiety and syncopal reactions would also directly influence donation intention.

The results of path analyses supported these predictions. The findings revealed that donation intention had the strongest direct influence on repeat donation behaviour. Satisfaction emerged as a direct predictor of donation intention, with higher levels of needle pain and reported syncopal reactions by phlebotomists associated with decreased satisfaction.

Moreover, the analyses indicated that anxiety and subjective syncopal symptoms exerted a direct effect on donation intention, rather than an indirect effect mediated by satisfaction.

Increased anxiety and higher levels of self-reported syncopal symptoms were associated with a reduced intention to provide a repeat donation.

These findings highlight the importance of donor satisfaction in shaping donation intention and subsequent behaviour. They also underscore the negative impact of anxiety, pain, and syncopal symptoms on satisfaction and intention to donate again. By addressing these factors and enhancing donor satisfaction through interventions, blood canters can potentially increase the likelihood of repeat donations (24)

The application of the Theory of Planned behaviors (TPB) in the context of donor retention has emphasized the significance of self-efficacy as a key determinant of blood donor behavior, specifically the intention to donate repeatedly. (25)

Extensive studies on the Theory of Planned Behavior (TPB) have focused on examining and validating hypotheses regarding the prediction of return behavior among blood donors. The findings suggest that attitude, subjective norm, and perceived control influence donors' intentions to return after their first donation, which subsequently predicts their actual donation behavior in the initial four months. Furthermore, during the following four months, donation intentions and behavior may also be influenced by self-identity, aligning with previous research findings. (9)

Understanding the factors that hinder or promote future blood donations is crucial. Various theoretical perspectives have been utilized to gain insights into blood donor behavior.

Numerous psychological theories have been examined for their effectiveness in understanding blood donor behavior. Some theories draw from animal learning theory, such as opponent

processes, habit formation, and reinforcement, while others stem from social psychology, including modeling, attribution theory, and the theory of reasoned action.

According to opponent process theory, emotionally significant events elicit an initial reaction (a process) followed by a counter-reaction (b process) of the opposite hedonic tone. In the context of blood donation, a heightened negative mood before donation should result in a heightened positive mood afterward. However, research suggests that reducing negative feelings prior to donation is more influential in predicting future donation behavior. Therefore, interventions aimed at relaxing donors and reducing tension before donation may be effective in promoting future donations. (26)

Habit formation plays a significant role in increasing the likelihood of future donations. Donors who engage in regular and consistent donation behaviors are more likely to become committed donors over time. The longer individuals continue to donate, the stronger their donation habit becomes, leading to a higher probability of sustained commitment to blood donation.

Understanding the factors that contribute to the maintenance of blood donor behavior, such as reinforcement, is crucial. By identifying and comprehending these factors, we can develop strategies and interventions that effectively reinforce and sustain blood donor behavior over time. (26)

The impact of reinforcements, such as financial incentives, on blood donor behavior differs from other types of donations. While financial rewards have shown to be effective motivators for certain types of donations, they have not proven effective for blood donation. In fact, providing monetary incentives to committed blood donors has been found to decrease their

donation frequency, potentially due to a shift in self-perception and concerns about being perceived as mercenary. However, non-financial incentives like T-shirts have shown success in motivating both first-time and committed blood donors. (27)

Additional recruitment techniques that have shown effectiveness in predicting future donor behavior include: (1) providing education and information through social learning, (2) utilizing reminder phone calls and letters either separately or in combination, and (3) employing persuasive communications.

Persuasion plays a role in fostering self-efficacy beliefs, suggesting that the effects of persuasive communications and information provision may be mediated by the development of self-efficacy beliefs. However, further research is needed to investigate this potential mechanism. (27)

Other theories that focus on donor behavior are of the following:

- Stress theory: Like many medical treatments blood donation can be a stressful experience especially for first-time donors.
- According to the theory of self-efficacy, an individual's belief in their ability to perform a specific behavior serves as a cognitive mediator for behavioral responses and change. High self-efficacy leads to increased motivation, effort, persistence, and positive situational appraisal. (25)

**Studies related to the emotions in context of blood donation**

The past research has identified cognitive antecedents of the decision to donate as well as characteristics of donors and non-donors. Yet relatively little is known about methods to encourage retention.

In a longitudinal study, it was found that the pre-donation phase of blood donation is associated with negative affect (bad mood), including mild feelings of nervousness, tension, and anxiety. On the other hand, the post-donation phase is characterized by feelings of elation and being refreshed (good mood). The frequency of previous donations was also linked to the pre-donation mood, with new donors experiencing stronger negative emotions compared to repeat donors. However, an increase in positive feelings was not observed with greater donation frequency. (28)

In a study conducted by Chris Allan, it was confirmed that emotions complement cognitive information, supporting the hypothesis that emotional responses play a significant role alongside cognitive processes. (29)

A study conducted by Amanda Thijsen found that the occurrence of vasovagal reactions (VVR) during blood donation was higher among donors with lower levels of closeness or trust and higher fearfulness. The study also suggested that blood donation canters should consider a broader range of emotions when implementing interventions to reduce the occurrence of donor reactions. Furthermore, the study identified that the occurrence of VVR was significantly associated with lower levels of love/closeness/trust and higher levels of scared/fearful/afraid states. The study also highlighted that the effect of scared/fearful/afraid decreased, while

stressed/nervous/overwhelmed increased from the waiting area to before venepuncture in relation to the possibility of a VVR. (30)

## 3)Aims& Objectives:

### AIM:

To study the emotional profile of first-time whole blood donors and the impact of emotional trajectories over feedback for donor return

### OBJECTIVES:

1) To identify positive and negative emotions of the first-time whole blood donors at three stations (before, during and after) of the blood donation process

2) To develop trajectories of blood donors 'emotional experience during the entire blood donation process.

3) To analyze the impact of trajectories of emotional experience on blood donor return based on the feedback given.

## 4)Materials& Methods:

### Type of Study:

Longitudinal (Observational)

### Study design:

Time Series design

**Study Population:** blood donors who come register themselves for blood donation in AIIMS blood center.

### Inclusion criteria:

1) First time (Voluntary /Replacement) whole blood donors who satisfy the blood donation screening criteria as per the norms of Govt. of India.

2) Blood donors of age between 18-60 years

3) Either gender

**Exclusion criteria :**

1) Repeat (Voluntary / Replacement) donor

2) Temporary and permanently deferred

3) Donors who refuse to give consent

**Study setting:**

From Waiting area of blood bank to phlebotomy area and refreshment area

**Study Duration:**

From the date of approval to June 2023

**Sample Size:**

We calculated sample size based on the study conducted by Anne Van Dongen et al., the probability of lowest return rate among the one group. is mentioned as 28.95%

the formula for sample size calculation is as follows:

n =Z^2(pq)/d^2 where n=sample size

Z=1.96 (Z value for alpha error)

p=28 (Proportion in the previous study)

q=72 (100-p)

=d Absolute precision (=5 here)

and n value derived is 309 and considering the nonresponse rate of 10%, total sample size calculated was 340.

We collected final sample of 360 paricipants.

**Place of Study:**

Blood center, Department of Transfusion Medicine & Blood bank, AIIMS Bhopal

**Statistical analysis:**

The data obtained from the completed questionnaires was manually entered in Microsoft Excel (version-Office 365). The data was appropriately recorded for the variables. The final sheet was imported into the IBM SPSS (Statistical Package for Social Science) and R software.

Continuous data was described in mean and standard deviation, median and the interquartile range (IQR). The Outcome variables which were nominal expressed in terms of frequencies and percentages. Further Chi-Square test or Fisher's test was used to find an association between categorical variables.

Non-parametric tests (Friedman test) were used to make statistical inference as data were not normally distributed. Friedman test was used to explore whether different emotions were changed significantly over time.

Prediction analysis of emotional trajectories were done using area under area under the receiver operating characteristic (AUROC), sensitivity, specificity, Positive and Negative predictive value, accuracy, and were determined with 95% confidence interval.

**Methodology:**

**Selection of tool:**

**PANAS SCALE ( POSITIVEAND NEGATIVE AFFECT SCHEDULE):**

The Positive and Negative Affect Schedule (PANAS) is the most widely and frequently used scale to assess positive and negative affect. (31)

The PANAS has been validated in several languages, and it has shown excellent psychometric properties in the general population and some clinical samples, like forensic samples, substance users, and adult women with fibromyalgia. The PANAS scale was designed by Watson et al. in 1988. The results of these studies have shown to be having an excellent internal consistency and discriminant validity. The scale has been validated in several languages in both western (e.g. Italy ; France and Canada ; Hungary:) and eastern countries (e.g. Turkey ; Mexico; Korea ; Argentina ; Brazil ; Africa ; India; Pakistan).(32)

It has list of 20 adjectives that measure positive feelings (emotions), such as joy or pleasure, and negative feelings, such as anxiety or sadness. There are 10 adjectives for each dimension. It has a 5-point scale ( Likert) ranging from 1 (very slightly or not at all) to 5 (extremely). It is self-administered / clinician rated and takes 2-5 minutes for single time administration. (Permission was not needed: available in Public domain).

**FEEDBACK PROFORMA:**

Feedback proforma has been developed based on the review literature and clinical expertise as well as current scenario of blood centres.

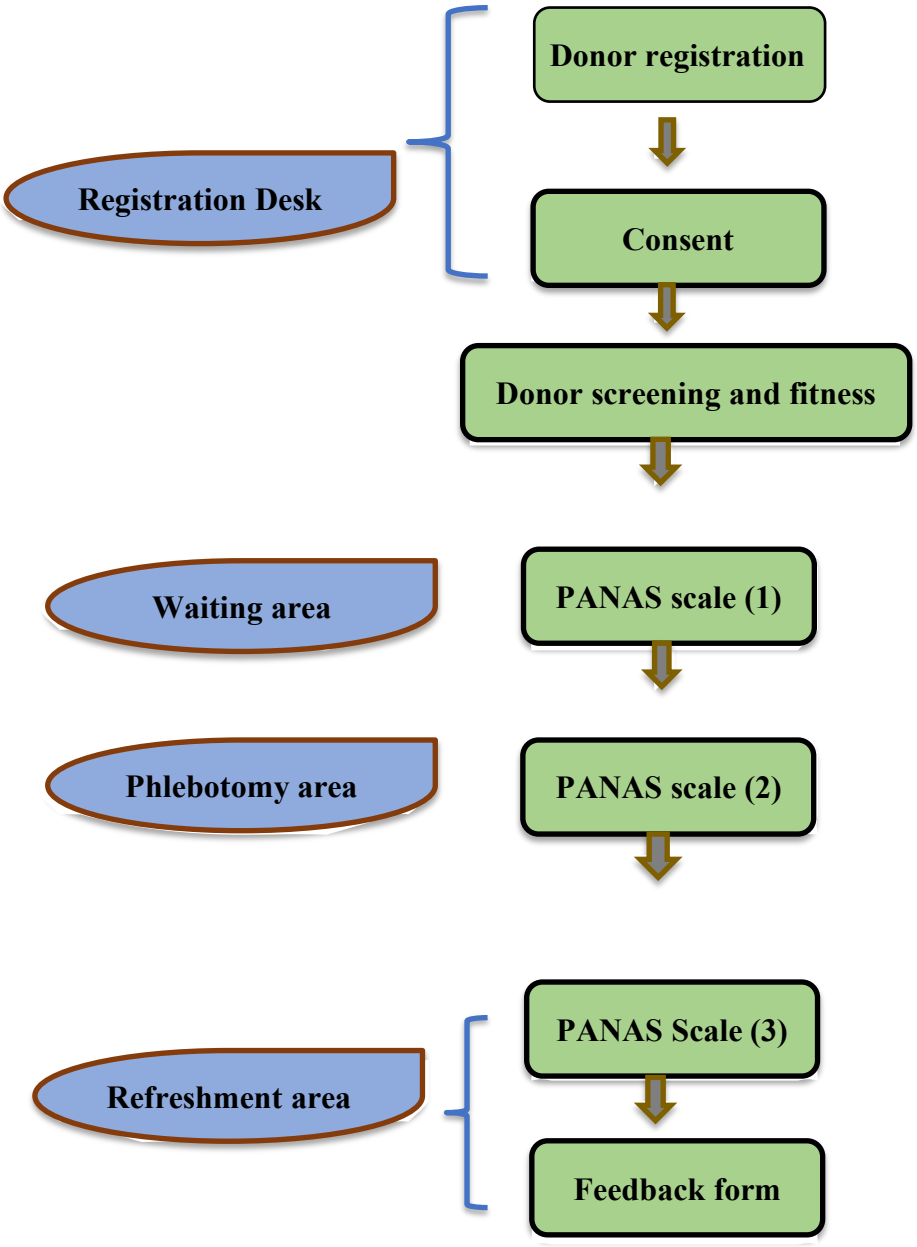
**PROCEDURE:**

The study was conducted in the blood centre of All India Institute of Medical Science. Only the first-time donors (Voluntary / Replacement) will be included in the study. First, the donor registration was be performed in the reception area. Then these registered donors were asked to fill the consent form after verbal explanation of the study and providing a written participant information sheet(PIS) in the reception area of the blood donation Centre. The registered donors who refused consent were excluded.

The donor screening and fitness was performed as per the national guidelines, and fit donors were asked to mark the PANAS scale by self or by trained doctor in the waiting area. The similar marking of PANAS scale was performed in the phlebotomy area during the donation process and in the refreshment area. (post donation process).

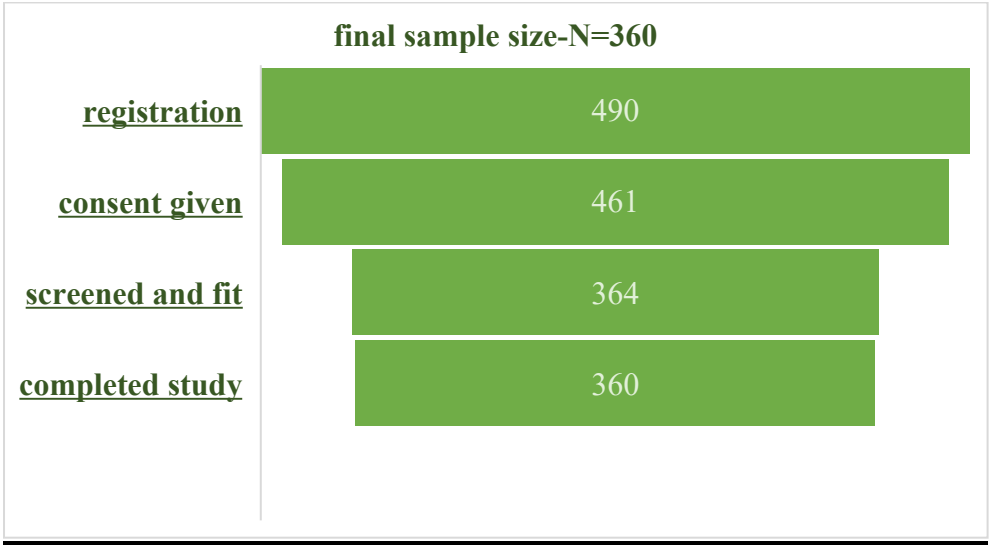
Before leaving the blood bank, all donors were asked questions about overall experience and 'willingness' for return in the feedback form. Total 360 donors completed the process. Donations with under-collection and donor reactions were also considered in this study.

**FLOW OF THE STUDY:**



## 5)RESULTS:

*Figure 1: Collection of samples*




Total 360 donors were enrolled in the study.

## DEMOGRAPHICAL DETAILS OF DONORS:

### Distribution of Donors by age group:

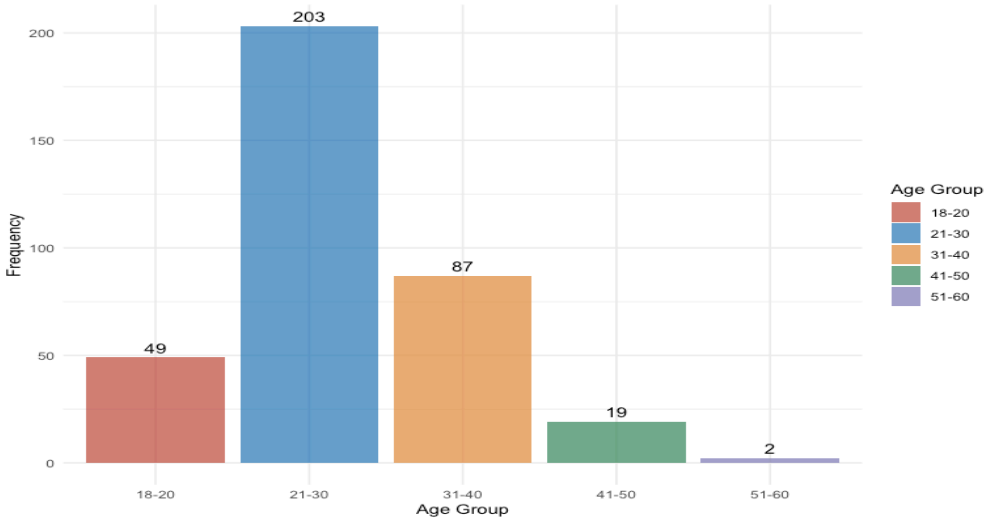
*Table 1 : Distribution of donors by age*

**Distribution by Age group**

| Characteristic | N = 360[1] |
|---|---|
| Age | 27.7 (7.1) |
| Age_Group | |
| 18-20 | 49 (13.6%) |
| 21-30 | 203 (56.4%) |
| 31-40 | 87 (24.2%) |
| 41-50 | 19 (5.3%) |
| 51-60 | 2 (0.6%) |
| [1]Mean (SD); n (%) | |

The age range of the donors varied from 18 to 60 years. The highest number of donors belonged to the age group of 21 to 30 years The average age of the donors was 27.75 ± 7.10 years.

*Figure 2: Age group wise distribution*




The highest number of donors belonged to the age group of 21 to 30. The age of donors ranged from 18 to 60 years. The mean age of the donors was 27.75 years, with a standard deviation of 7.10.

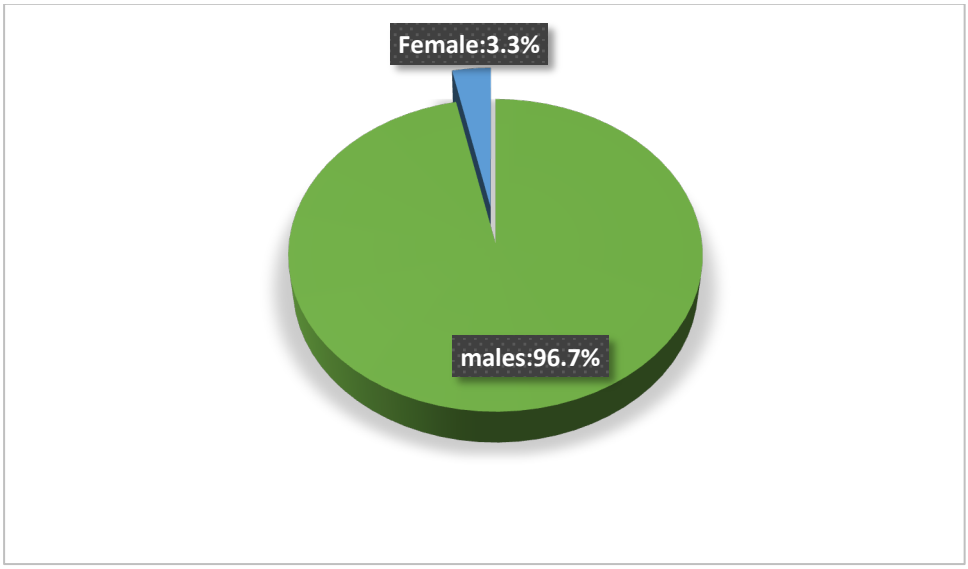
**Gender Distribution:**

*Table 2: Gender wise distribution*

| **Characteristic** | **N = 360[1]** |
|---|---|
| Sex | |
| FEMALE | 12 (3.3%) |
| MALE | 348 (96.7%) |
| [1]n (%) | |

Regarding gender distribution, out of the total 360 participants, 12 (3.3%) were females and 348 (96.7%) were males.

*Figure 3 : Gender distribution*




**ADDRESS OF DONORS:**

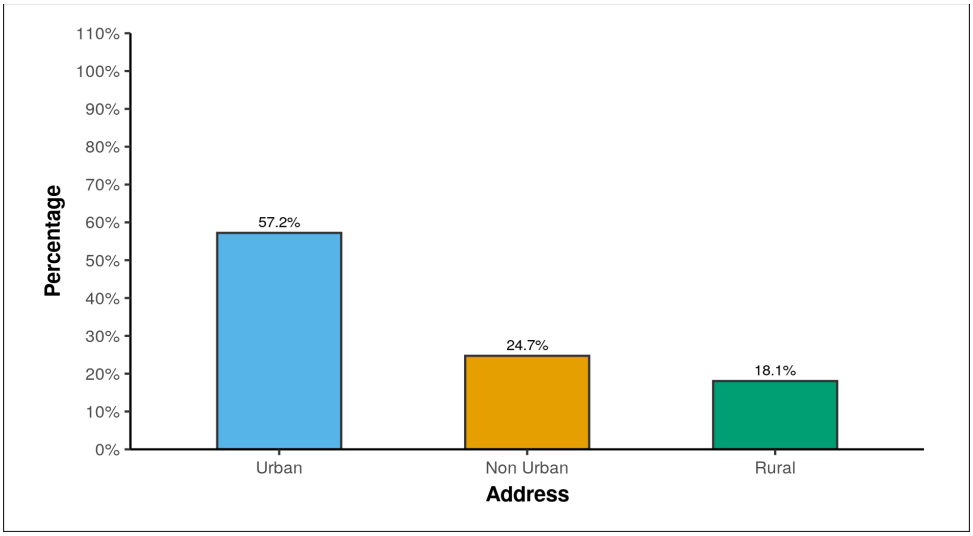
- Characteristics of donors based on their address:

*Table 3: Address of donors*

| Address | Frequency | Percentage | 95% CI |
|---|---|---|---|
| Urban | 206 | 57.2% | 51.9% - 62.4% |
| Non-Urban | 89 | 24.7% | 20.4% - 29.6% |
| Rural | 65 | 18.1% | 14.3% - 22.5% |

Based on the characteristics of donors, it was found that 57.2% of the participants had an urban address, 24.7% had a non-urban address, and 18.1% had a rural address.

*Figure 4: Distribution based on address*



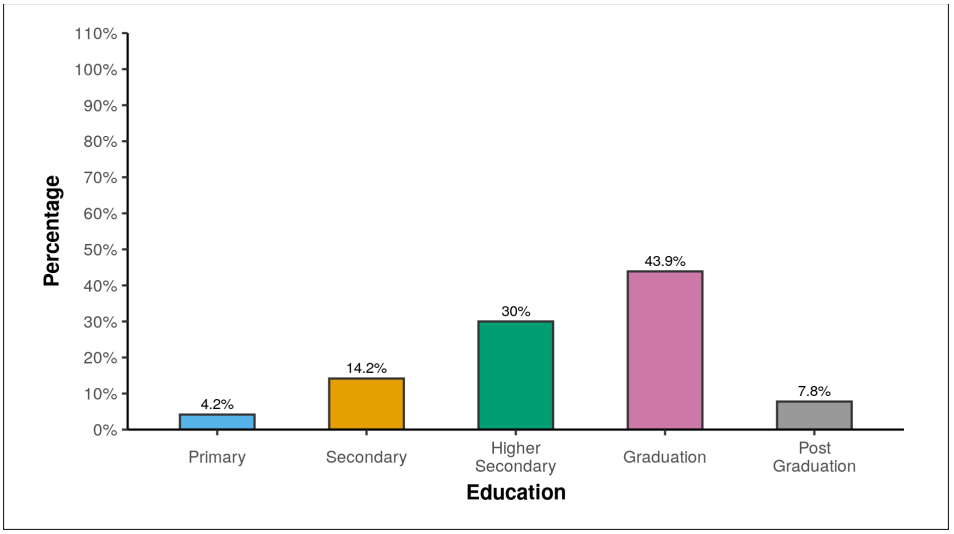

## Education:

*Table 4 : Distribution of donors based on education status*

| Education | Frequency | Percentage | 95% CI |
|---|---|---|---|
| Primary | 15 | 4.2% | 2.4% - 6.9% |
| Secondary | 51 | 14.2% | 10.8% - 18.3% |
| Higher Secondary | 108 | 30.0% | 25.4% - 35.1% |
| Graduation | 158 | 43.9% | 38.7% - 49.2% |
| Post Graduation | 28 | 7.8% | 5.3% - 11.2% |

The education level of the donors varied, with 4.2% having a primary education, 14.2% having a secondary education, 30.0% having a higher secondary education, 43.9% having a graduation degree, and 7.8% having a post-graduation degree.

*Figure 5 : Distribution of donors based on education*




The distribution of education among the donors shows that the highest percentage of donors, 43.9%, had a graduation degree. This was followed by 30.0% of donors with a higher secondary education, 14.2% with a secondary education, 7.8% with a post-graduation degree, and the lowest percentage, 4.2%, with a primary education. This suggests that a significant proportion of donors had higher levels of education, indicating a positive correlation between education level and blood donation.

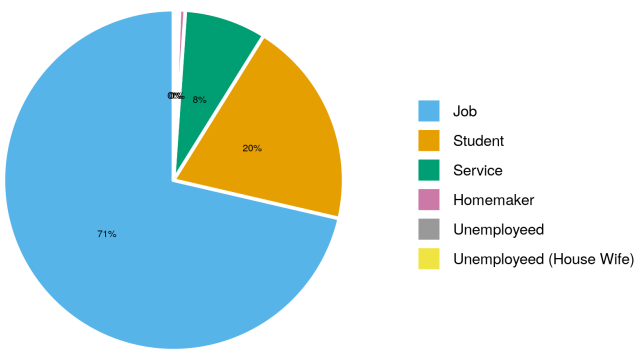
## Occupation:

*Table 5: Distribution based on Occupation*

| Occupation | Frequency | Percentage | 95% CI |
|---|---|---|---|
| Job | 257 | 71.4% | 66.4% - 75.9% |
| Student | 71 | 19.7% | 15.8% - 24.3% |
| Service | 28 | 7.8% | 5.3% - 11.2% |
| Homemaker | 2 | 0.6% | 0.1% - 2.2% |
| Unemployed | 1 | 0.3% | 0.0% - 1.8% |
| Unemployed (Housewife) | 1 | 0.3% | 0.0% - 1.8% |

The distribution of occupation among the donors reveals that 71.4% of donors were employed in a job. Around 19.7% of donors were students, 7.8% were in service occupations, and a small percentage, 0.6%, were homemakers. There were also a few donors who were unemployed or unemployed housewives, each accounting for 0.3% of the total. These findings indicate that a significant proportion of blood donors were employed individuals, followed by students and those in service occupations.

*Figure 6: Distribution based on Occupation*



**RESULTS OF PANAS SCALE – AREA WISE DISTRIBUTION OF DONOR EMOTIONS:**

*Table 6 : Distribution of scores of PANAS variables across all the areas*

| **Characteristic** | **1_Waiting, N = 360[1]** | **2_Donation, N = 360[1]** | **3_Refreshment, N = 360[1]** |
|---|---|---|---|
| INTERESTED | 4.59 (0.65) | 4.31 (0.88) | 4.67 (0.56) |
| DISTRESSED | 1.49 (0.86) | 1.57 (0.88) | 1.14 (0.35) |
| EXCITED | 4.25 (0.86) | 4.06 (0.92) | 4.46 (0.72) |
| UPSET | 1.32 (0.70) | 1.38 (0.74) | 1.16 (0.57) |
| STRONG | 4.38 (0.91) | 4.30 (0.93) | 4.72 (0.45) |
| GUILTY | 1.05 (0.22) | 1.05 (0.21) | 1.14 (0.65) |
| SCARED | 1.66 (0.90) | 2.12 (1.08) | 1.15 (0.40) |
| HOSTILE | 1.44 (0.83) | 1.64 (0.97) | 1.20 (0.57) |
| ENTHUSIASTIC | 4.44 (0.82) | 4.33 (0.85) | 4.54 (0.70) |
| PROUD | 4.68 (0.55) | 4.54 (0.92) | 4.82 (0.42) |
| IRRITABLE | 1.14 (0.35) | 1.37 (0.80) | 1.15 (0.51) |
| ALERT | 4.36 (0.88) | 4.37 (0.88) | 4.40 (0.87) |
| ASHAMED | 1.11 (0.43) | 1.11 (0.31) | 1.03 (0.17) |
| INSPIRED | 4.54 (0.65) | 4.53 (0.58) | 4.58 (0.58) |

| | | | |
|---|---|---|---|
| NERVOUS | 1.71 (0.95) | 1.75 (0.97) | 1.11 (0.52) |
| DETERMINED | 4.34 (0.89) | 4.42 (0.74) | 4.49 (0.78) |
| ATTENTIVE | 4.43 (0.74) | 4.45 (0.69) | 4.40 (0.85) |
| JITTERY | 1.22 (0.60) | 1.39 (0.77) | 1.09 (0.41) |
| ACTIVE | 4.55 (0.59) | 4.39 (0.74) | 4.66 (0.59) |
| AFRAID | 1.59 (0.89) | 1.89 (0.91) | 1.17 (0.47) |

The table shows the distribution of scores for various PANAS (Positive and Negative Affect Schedule) variables across three different areas: Waiting, Donation, and Refreshment. The scores are presented as mean values with their corresponding standard deviations.

In the Waiting area, participants reported high levels of interest (4.59), excitement (4.25), feeling strong (4.38), enthusiasm (4.44), pride (4.68), being alert (4.36), feeling inspired (4.54), determination (4.34), attentiveness (4.43), and being active (4.55). On the negative affect side, participants reported relatively low levels of distress (1.49), feeling upset (1.32), guilt (1.05), hostility (1.44), irritability (1.14), and feeling jittery (1.22).

During the Donation process, there was a slight decrease in positive affect scores compared to the Waiting area, but still, relatively high levels were reported for variables such as interest (4.31), excitement (4.06), feeling strong (4.30), enthusiasm (4.33), pride (4.54), being alert (4.37), feeling inspired (4.53), determination (4.42), attentiveness (4.45), and being active (4.39). Negative affect scores showed a slight increase compared to the Waiting area, with slightly higher levels reported for distress (1.57), feeling upset (1.38), guilt (1.05), hostility (1.64), irritability (1.37), and feeling jittery (1.39).

In the Refreshment area, positive affect scores increased again, with higher levels reported for variables such as interest (4.67), excitement (4.46), feeling strong (4.72), enthusiasm (4.54), pride (4.82), being alert (4.40), feeling inspired (4.58), determination (4.49), attentiveness (4.40), and being active (4.66). Negative affect scores decreased further compared to both the Waiting and Donation areas, with lower levels reported for distress (1.14), feeling upset (1.16), guilt (1.14), hostility (1.20), irritability (1.15), and feeling jittery (1.09).

The data thus suggests that participants experienced a range of positive emotions during the blood donation process, with slight fluctuations observed across different areas. Negative affect scores remained relatively low throughout the process.

**Predominant emotions in the waiting area**

| Emotion | Percentage (%) |
|---|---|
| ACTIVE | 98.33 |
| PROUD | 95.83 |
| INTERESTED | 92.50 |
| INSPIRED | 92.22 |
| ALERT | 90.56 |
| ATTENTIVE | 90.00 |
| STRONG | 86.39 |
| ENTHUSIASTIC | 86.11 |
| DETERMINED | 83.33 |
| EXCITED | 82.22 |
| AFRAID | 7.78 |
| NERVOUS | 6.67 |
| SCARED | 5.00 |
| DISTRESSED | 4.17 |
| HOSTILE | 4.17 |
| UPSET | 1.39 |
| ASHAMED | 1.39 |
| JITTERY | 1.39 |
| GUILTY | 0.00 |
| IRRITABLE | 0.00 |

*Table 7:Predominant emotions in the waiting area*

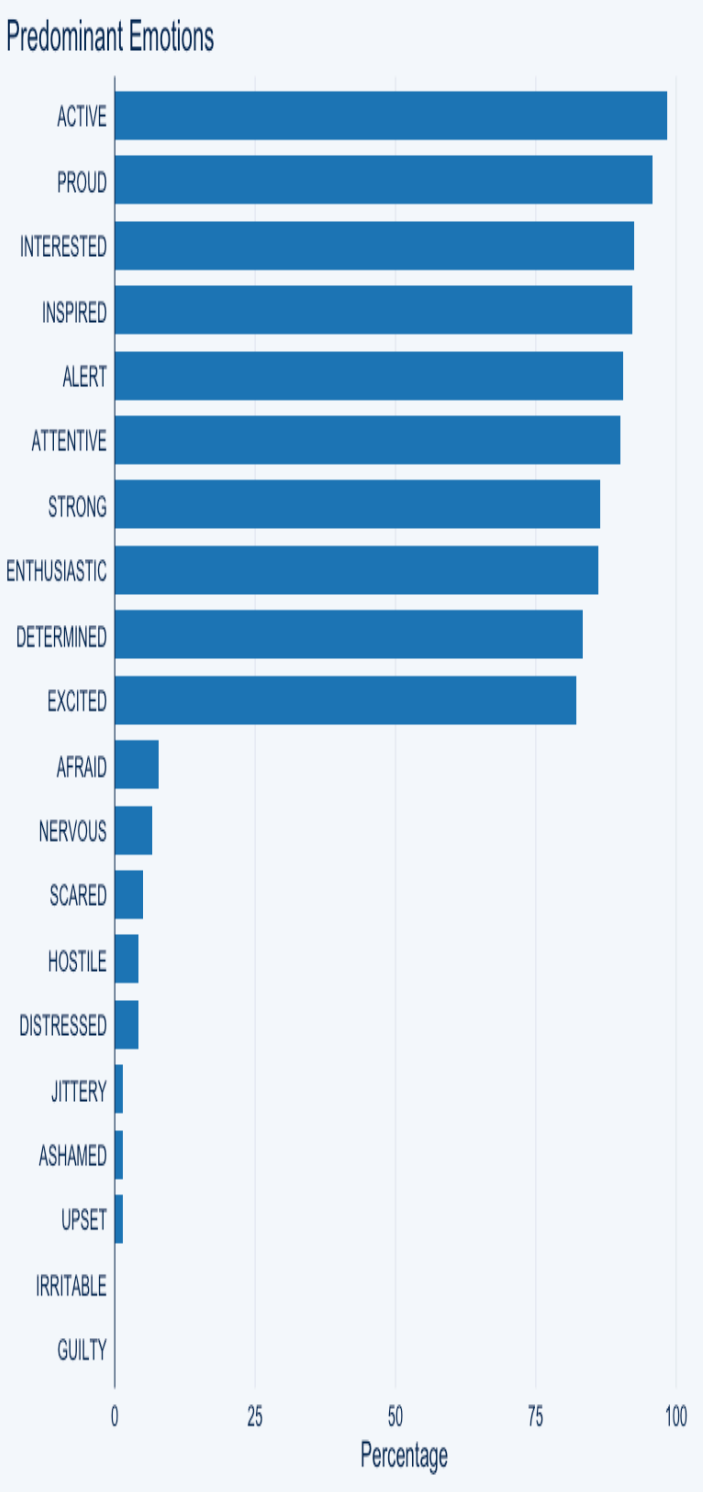



*Figure 7: Predominant emotions in the waiting area*

In the waiting area, the predominant emotions reported by participants were primarily positive. The most prominent emotions were "Active" (98.33%), "Proud" (95.83%), "Interested" (92.50%), "Inspired" (92.22%), and "Alert" (90.56%). These emotions indicate engagement, confidence, curiosity, motivation, and attentiveness among the donors.

Among the negative emotions, "Afraid" (7.78%) and "Nervous" (6.67%) were the most prominent. Although these emotions were present, their percentages were significantly lower compared to the positive emotions mentioned above.

It is worth noting that the prevalence of positive emotions was much higher than that of negative emotions in the waiting area. This suggests that donors generally experience a positive emotional state characterized by being active, proud, interested, inspired, and alert while waiting their turn.

The absence or low percentages of emotions like "Guilty" and "Irritable" suggest that the donors did not commonly experience these emotions in the waiting area.

Overall, the findings indicate that the waiting area was associated with predominantly positive emotions, fostering an atmosphere of enthusiasm, positivity, and engagement among the blood donors.

**Predominant emotions during donation:**

| Emotion | Percentage(%) |
|---|---|
| INSPIRED | 95.56 |
| ATTENTIVE | 94.17 |
| PROUD | 92.50 |
| DETERMINED | 92.22 |
| ACTIVE | 91.67 |
| ALERT | 88.33 |
| ENTHUSIASTIC | 85.00 |
| INTERESTED | 82.78 |
| STRONG | 80.28 |
| EXCITED | 76.94 |
| SCARED | 10.56 |
| NERVOUS | 6.67 |
| IRRITABLE | 5.00 |
| DISTRESSED | 4.72 |
| HOSTILE | 4.44 |
| AFRAID | 4.44 |
| JITTERY | 2.78 |
| UPSET | 1.39 |
| GUILTY | 0.00 |
| ASHAMED | 0.00 |

*Table 8: Predominant emotions during donation:*

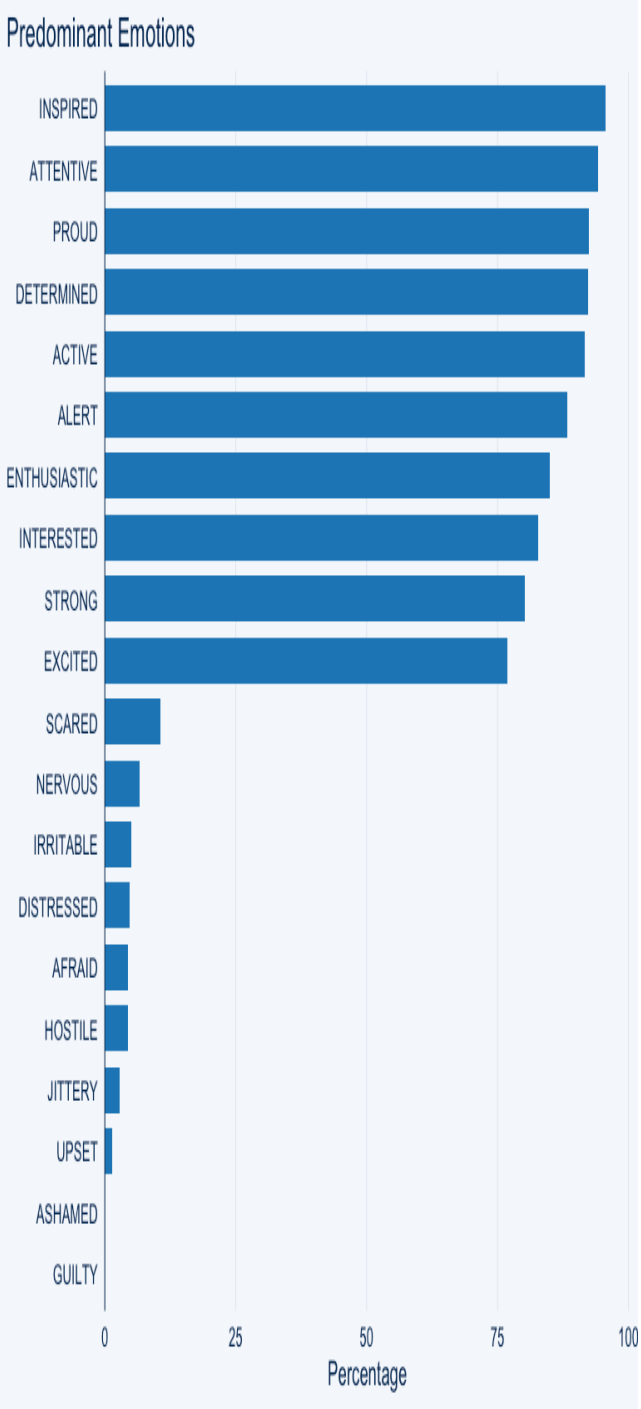



*Figure 8: Predominant emotions during donation*

During the donation process, the most intense emotions reported by participants were primarily positive. The most intense emotions experienced during donation were "Inspired" (95.56%), "Attentive" (94.17%), "Proud" (92.50%), "Determined" (92.22%), and "Active" (91.67%). These emotions reflect a high level of focus, engagement, confidence, and motivation among the donors during the blood donation.

Among the negative emotions, "Scared" (10.56%) and "Nervous" (6.67%) remained the most intense. This suggests that some donors experienced fear and anxiety during the donation process. Additionally, "Jittery" (2.78%) was reported as an increasingly intense negative emotion during donation compared to the waiting area.

It is important to note that while intense negative emotions were present, their percentages were relatively low compared to the positive ones mentioned above. This indicates that donors maintained a positive emotional state during the donation process, characterized by being inspired, attentive, and proud.

Emotions like "Guilty" and "Ashamed" were not reported by any donors during the donation process, suggesting that these emotions were not commonly experienced in this context.

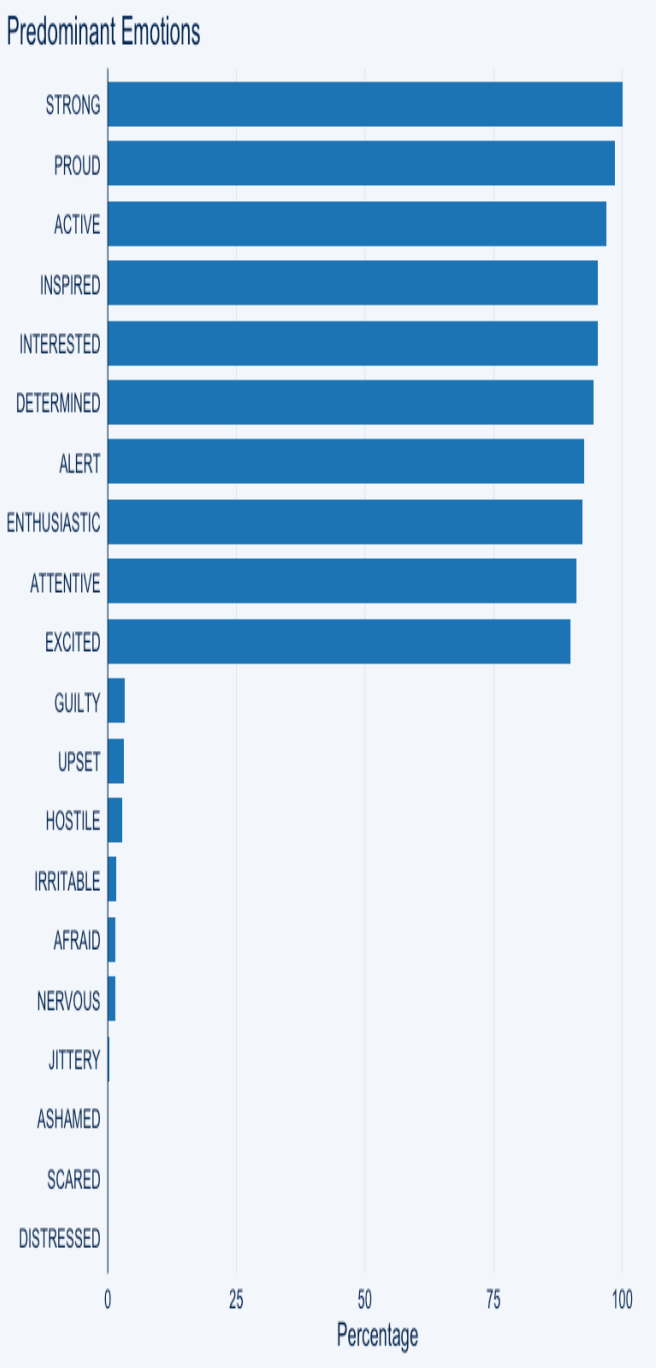
Overall, the findings indicate that during the donation process, donors experienced a range of emotions, with a focus on positive emotions such as inspiration, attentiveness, and pride. Although some negative emotions were present, they were generally less intense than positive ones. The increased intensity of jitteriness suggests a heightened sense of unease or restlessness during the donation process.

## Predominant emotions After donation:

*Table 9: Predominant emotions After donation*

| Emotion | Percentage(%) |
|---|---|
| STRONG | 100.00 |
| PROUD | 98.61 |
| ACTIVE | 96.94 |
| INTERESTED | 95.28 |
| INSPIRED | 95.28 |
| DETERMINED | 94.44 |
| ALERT | 92.50 |
| ENTHUSIASTIC | 92.22 |
| ATTENTIVE | 91.11 |
| EXCITED | 90.00 |
| GUILTY | 3.33 |
| UPSET | 3.06 |
| HOSTILE | 2.78 |
| IRRITABLE | 1.67 |
| NERVOUS | 1.39 |
| AFRAID | 1.39 |
| JITTERY | 0.28 |
| DISTRESSED | 0.00 |
| SCARED | 0.00 |
| ASHAMED | 0.00 |

*Figure 9: Predominant emotions After donation*



After donation, the predominant emotions experienced by donors were overwhelmingly positive. The most intense emotion reported by all donors was "Strong" (100.00%), indicating a sense of physical and emotional resilience and satisfaction after the donation.

Other intense positive emotions reported included "Proud" (98.61%), "Active" (96.94%), "Interested" (95.28%), "Inspired" (95.28%), and "Determined" (94.44%). These emotions suggest a feeling of accomplishment, engagement, and motivation among donors after donation.

The drop in intensity of most negative emotions in the refreshment area indicates a shift towards a more positive emotional state. Emotions such as "Guilty" (3.33%), "Upset" (3.06%), "Hostile" (2.78%), "Irritable" (1.67%), "Nervous" (1.39%), "Afraid" (1.39%), "Jittery" (0.28%), "Distressed" (0.00%), "Scared" (0.00%), and "Ashamed" (0.00%) were relatively less intense.

This pattern suggests that donors experience a sense of strength, pride, and positivity after the donation, while negative emotions decrease in intensity. The refreshment area may contribute to creating an environment of elation and well-being among the donors.

Notably, the dominant emotions after donation are consistently positive, indicating a positive emotional impact of the blood donation experience on donors.

**TRAJECTORY – CHANGES IN THE EMOTIONS OVER THE PERIOD OF TIME**:

The areas were divided in three points:

- Waiting area: T1
- Phlebotomy area: T2
- Refreshment area: T3

Based on that, all trajectories were depicted first and then, only significant emotions were assessed. Non-parametric tests (Friedman test) were used to make statistical inference as data were not normally distributed. Friedman test was used to explore whether the Interested changed significantly over time.

.

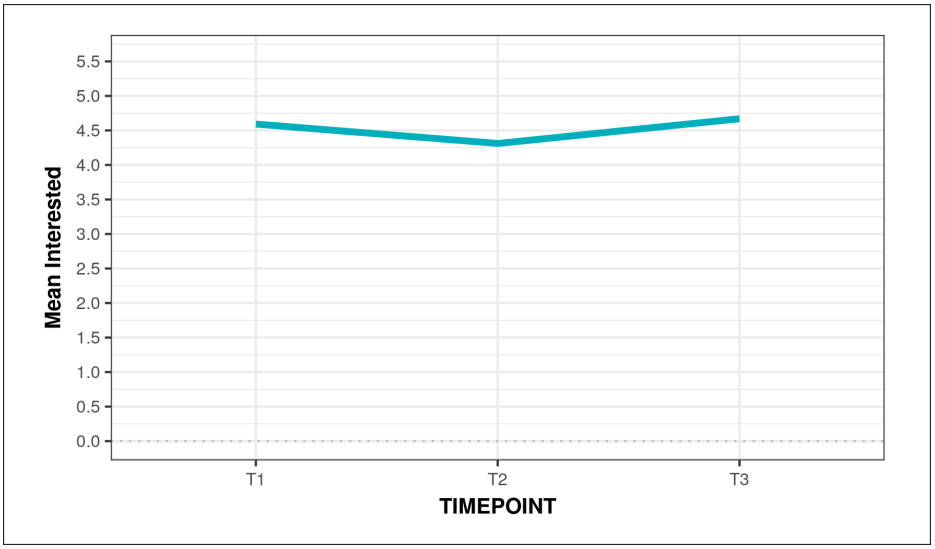
1) **Assessment of changes in INTERESTED over period of time:**

*Table 10: Change in Interested Over Time*

| Timepoint | Interested | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 4.59 (0.65) | 5.00 (1.00) | 1.00 - 5.00 | 32.1 | <0.001 |
| T2 | 4.31 (0.88) | 5.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.67 (0.56) | 5.00 (1.00) | 3.00 - 5.00 | | |

The mean Interested decreased from 4.59 at the T1 timepoint to a minimum of 4.31 at the T2 timepoint, and then increased to 4.67 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 32.1$, $p = <0.001$).

*Figure 10: Change in Interested Over Time*



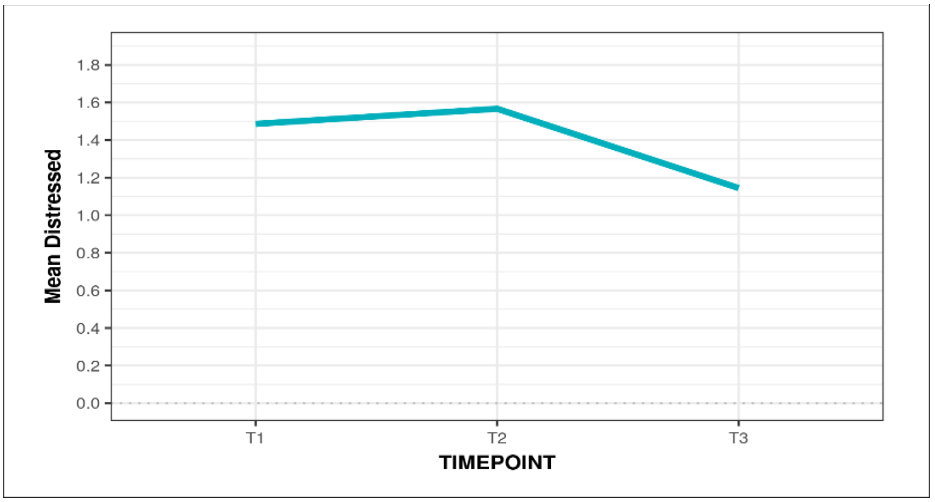

## 2) Assessment of changes in the distressed over the period of time:

*Table 11: Assessment of changes in the distressed over the period of time*

| Timepoint | Distressed | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.49 (0.86) | 1.00 (1.00) | 1.00 - 5.00 | 68.2 | <0.001 |
| T2 | 1.57 (0.88) | 1.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 1.14 (0.35) | 1.00 (0.00) | 1.00 - 2.00 | | |

The mean Distressed increased from 1.49 at the T1 timepoint to a maximum of 1.57 at the T2 timepoint, then decreased to 1.14 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 68.2$, $p = <0.001$).

*Figure 11: Assessment of changes in the distressed over the period of time*



## 3. Assessment of change in Excited over time

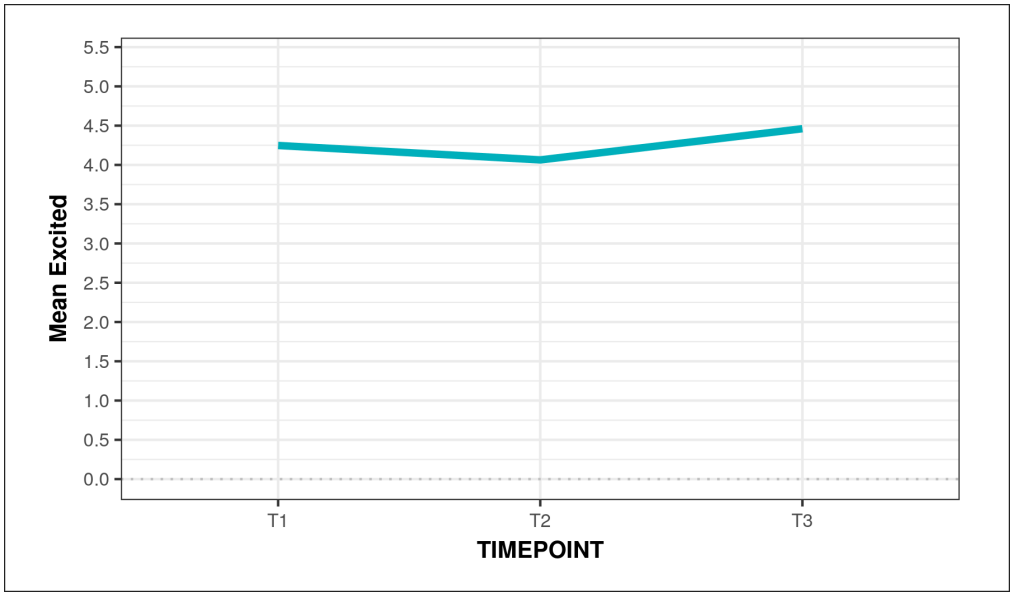
*Table 12: Assessment of change in Excited over time*

| Timepoint | Excited | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | $\chi 2$ | P Value |
| T1 | 4.25 (0.86) | 4.00 (1.00) | 1.00 - 5.00 | 40.3 | <0.001 |
| T2 | 4.06 (0.92) | 4.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.46 (0.72) | 5.00 (1.00) | 2.00 - 5.00 | | |

The mean Excited decreased from 4.25 at the T1 timepoint to a minimum of 4.06 at the T2 timepoint, and then increased to 4.46 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 40.3$, p = <0.001).

The following is a line diagram depicting the change in Excited over time.

*Figure 12: Line diagram depicting the change in Excited over time*



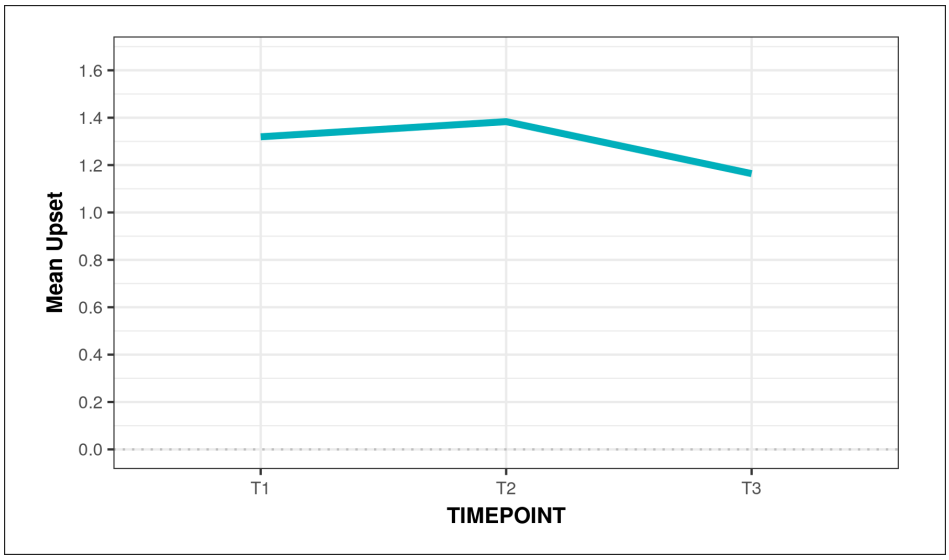
## 4. Assessment of change in Upset over time

*Table 13: Assessment of change in Upset over time*

| Timepoint | Upset | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.32 (0.70) | 1.00 (0.00) | 1.00 - 5.00 | 34.7 | <0.001 |
| T2 | 1.38 (0.74) | 1.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 1.16 (0.57) | 1.00 (0.00) | 1.00 - 4.00 | | |

The mean Upset increased from 1.32 at the T1 timepoint to a maximum of 1.38 at the T2 timepoint, and then decreased to 1.16 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 34.7$, $p = <0.001$).

*Figure 13: Change in Upset Over Time*



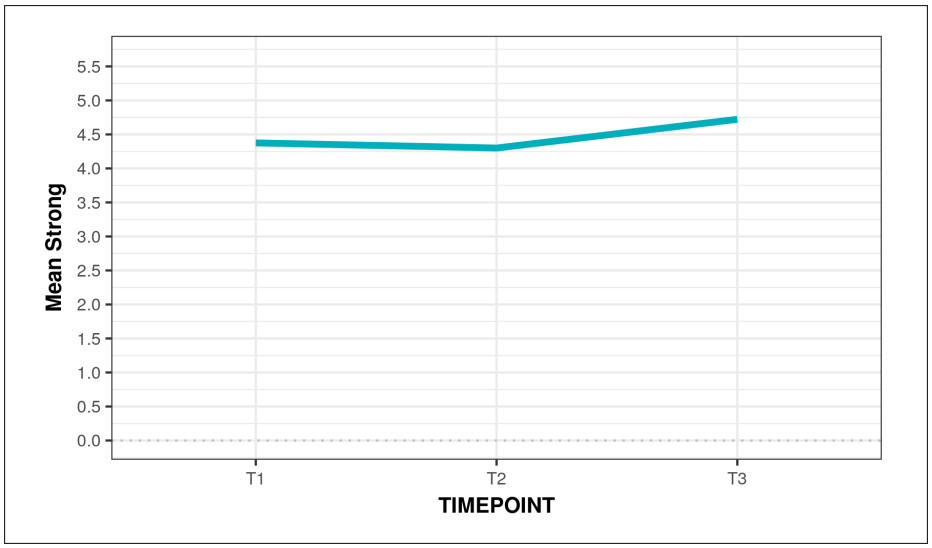
## 5) Assessment of change in Strong over time:

*Table 14: Assessment of change in Strong over time*

| Timepoint | Strong | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 4.38 (0.91) | 5.00 (1.00) | 1.00 - 5.00 | 42.9 | <0.001 |
| T2 | 4.30 (0.93) | 5.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.72 (0.45) | 5.00 (1.00) | 4.00 - 5.00 | | |

The mean Strong decreased from 4.38 at the T1 timepoint to a minimum of 4.30 at the T2 timepoint, and then increased to 4.72 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 42.9$, $p = <0.001$).

*Figure 14: Change in Strong Over Time*



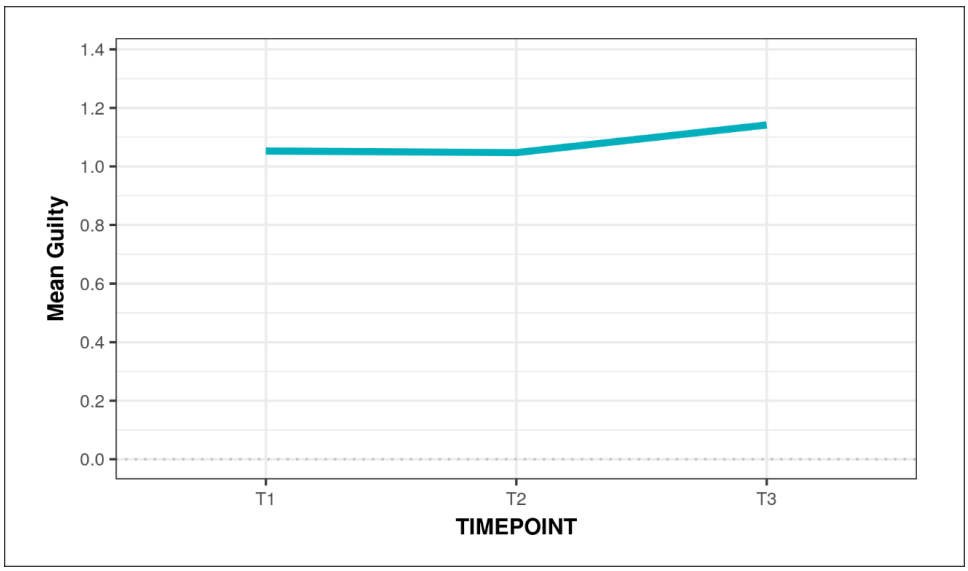
## 6)Assessment of change in Guilty over time

*Table 15: Assessment of change in Guilty over time*

| Timepoint | Guilty | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.05 (0.22) | 1.00 (0.00) | 1.00 - 2.00 | 0.4 | 0.804 |
| T2 | 1.05 (0.21) | 1.00 (0.00) | 1.00 - 2.00 | | |
| T3 | 1.14 (0.65) | 1.00 (0.00) | 1.00 - 5.00 | | |

The mean Guilty decreased from 1.05 at the T1 timepoint to a minimum of 1.05 at the T2 timepoint, and then increased to 1.14 at the T3 timepoint. This change was not statistically significant (Friedman Test: $\chi 2 = 0.4$, $p = 0.804$).

*Figure 15: Assessment of change in Guilty over time*



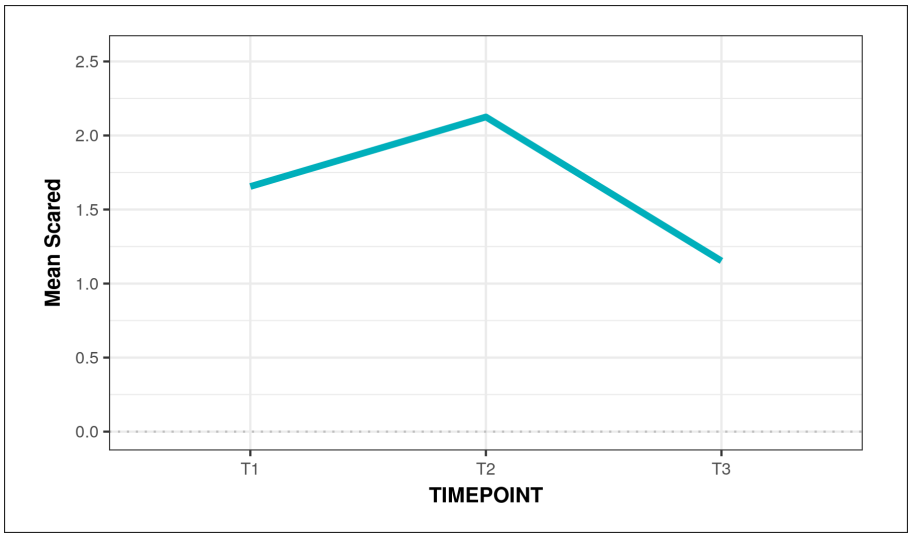
## 7)Assessment of change in Scared over time:

*Table 16: Assessment of change in Scared over time*

| Timepoint | Scared | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.66 (0.90) | 1.00 (1.00) | 1.00 - 5.00 | 217.4 | <0.001 |
| T2 | 2.12 (1.08) | 2.00 (2.00) | 1.00 - 5.00 | | |
| T3 | 1.15 (0.40) | 1.00 (0.00) | 1.00 - 3.00 | | |

The mean Scared increased from 1.66 at the T1 timepoint to a maximum of 2.12 at the T2 timepoint, and then decreased to 1.15 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 217.4$, $p = <0.001$).

*Figure 16: Assessment of change in Scared over time*



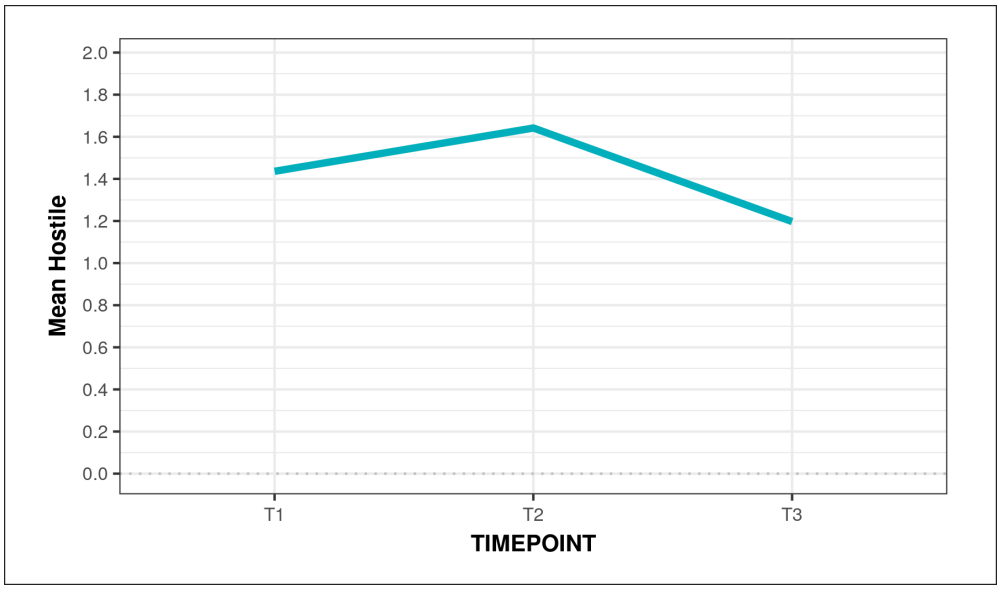
## 8)Assessment of change in Hostile over time:

*Table 17: Assessment of change in Hostile over time*

| Timepoint | Hostile | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.44 (0.83) | 1.00 (1.00) | 1.00 - 5.00 | 59.9 | <0.001 |
| T2 | 1.64 (0.97) | 1.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 1.20 (0.57) | 1.00 (0.00) | 1.00 - 4.00 | | |

The mean Hostile increased from 1.44 at the T1 timepoint to a maximum of 1.64 at the T2 timepoint, and then decreased to 1.20 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 59.9$, $p = <0.001$).

*Figure 17: Assessment of change in Hostile over time*



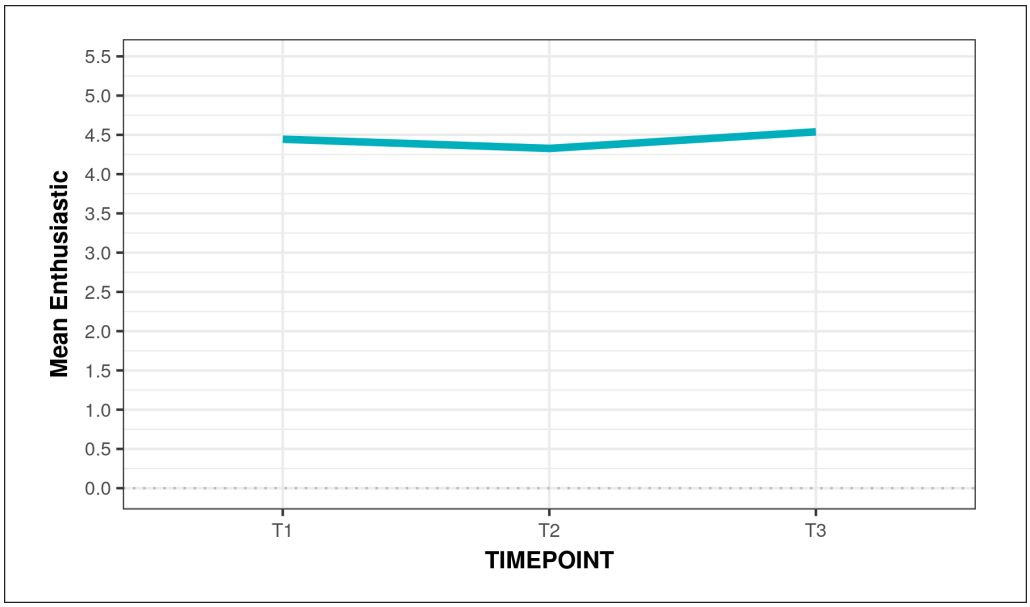
## 9)Assessment of change in Enthusiastic over time:

*Table 18: Change in Enthusiastic over time*

| Timepoint | Enthusiastic | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | $\chi 2$ | P Value |
| T1 | 4.44 (0.82) | 5.00 (1.00) | 1.00 - 5.00 | 12.6 | 0.002 |
| T2 | 4.33 (0.85) | 5.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.54 (0.70) | 5.00 (1.00) | 2.00 - 5.00 | | |

The mean Enthusiastic decreased from 4.44 at the T1 timepoint to a minimum of 4.33 at the T2 timepoint, and then increased to 4.54 at the T3 timepoint.

*Figure 18: Change in Enthusiastic over time*



The overall change of “Enthusiasm” of Donors across the different areas was statistically significant (Friedman Test: $\chi 2 = 12.6$, $p = 0.002$) with a positive increasing trend from the first to the end zone.

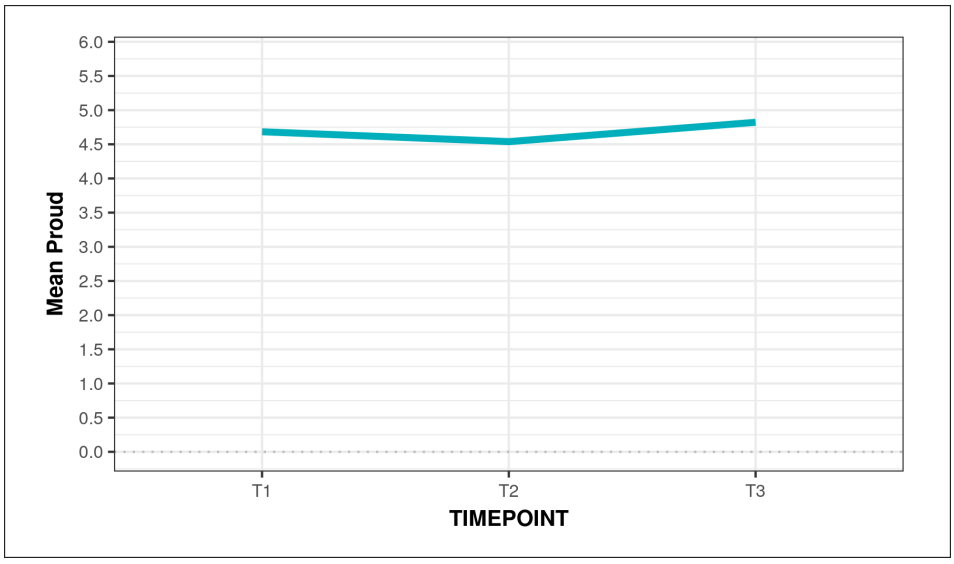
## 10)Assessment of change in Proud over time:

*Table 19: Change in Proud over time*

| Timepoint | Proud | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 4.68 (0.55) | 5.00 (1.00) | 3.00 - 5.00 | 23.3 | <0.001 |
| T2 | 4.54 (0.92) | 5.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.82 (0.42) | 5.00 (0.00) | 3.00 - 5.00 | | |

The mean Proud decreased from 4.68 at the T1 timepoint to a minimum of 4.54 at the T2 timepoint, and then increased to 4.82 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 23.3$, $p = <0.001$).

*Figure 19: Change in Proud over time*



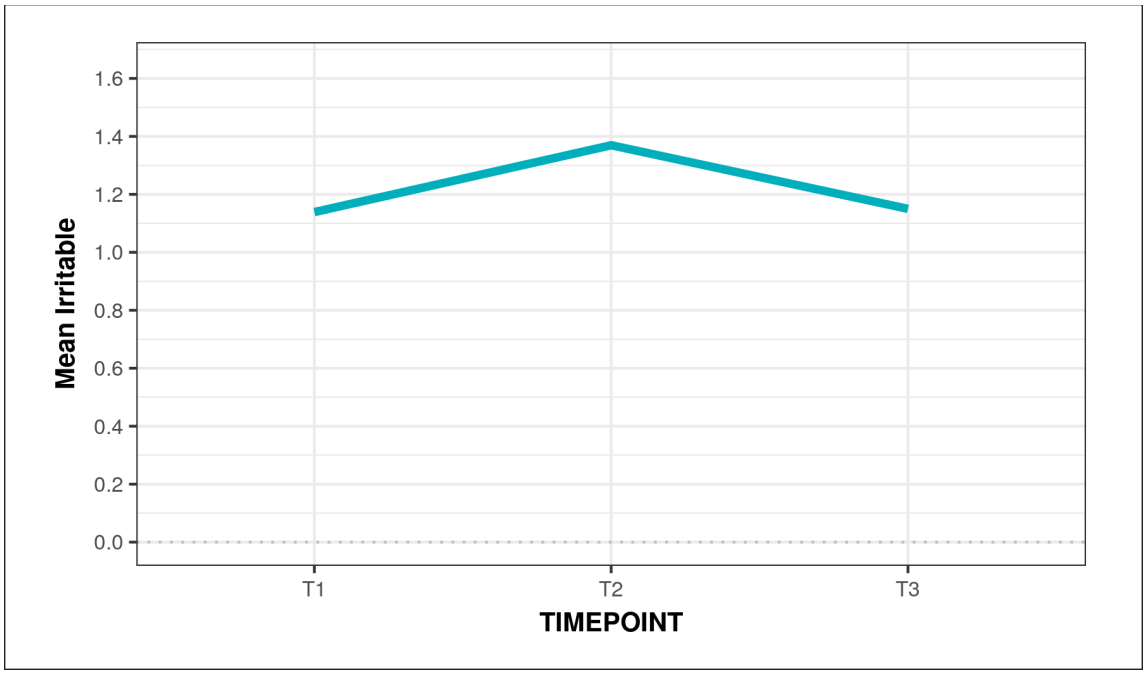
## 11)Assessment of change in Irritable over time:

*Table 20: Change in Irritable over time*

| Timepoint | Irritable | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.14 (0.35) | 1.00 (0.00) | 1.00 - 2.00 | 21.4 | <0.001 |
| T2 | 1.37 (0.80) | 1.00 (0.00) | 1.00 - 4.00 | | |
| T3 | 1.15 (0.51) | 1.00 (0.00) | 1.00 - 4.00 | | |

The mean Irritable increased from a minimum of 1.14 at the T1 timepoint to a maximum of 1.37 at the T2 timepoint, and then decreased to 1.15 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 21.4$, $p = <0.001$).

*Figure 20: Change in Irritable over time*



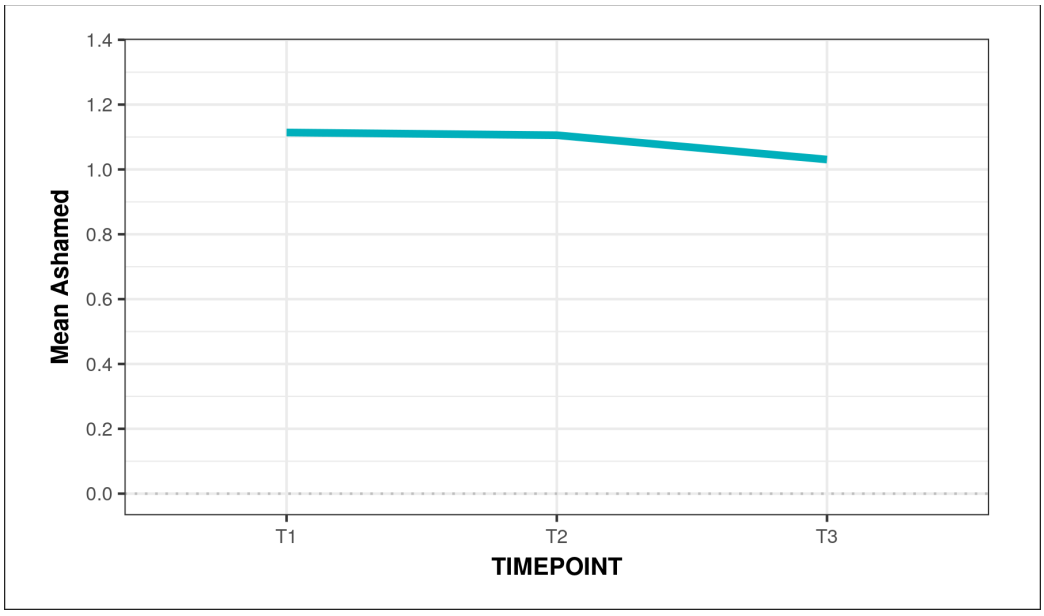
## 12)Assessment of change in Ashamed over time:

*Table 21: Change in Ashamed over time*

| Timepoint | Ashamed | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.11 (0.43) | 1.00 (0.00) | 1.00 - 4.00 | 15.9 | <0.001 |
| T2 | 1.11 (0.31) | 1.00 (0.00) | 1.00 - 2.00 | | |
| T3 | 1.03 (0.17) | 1.00 (0.00) | 1.00 - 2.00 | | |

The mean Ashamed decreased from a maximum of 1.11 at the T1 timepoint to a minimum of 1.03 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 15.9$, $p = <0.001$).

*Figure 21: Change in Ashamed over time*



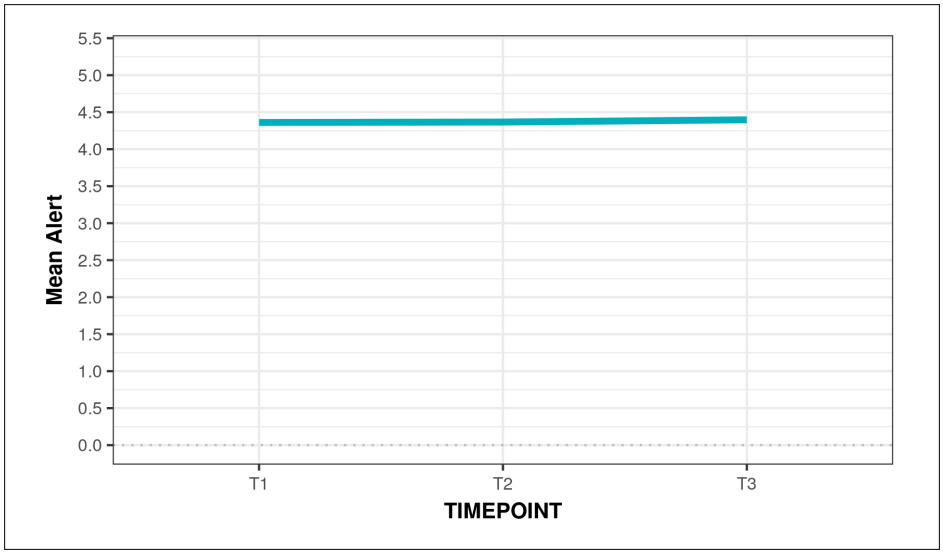
## 13)Assessment of change in Alert over time

*Table 22: Change in Alert over time*

| Timepoint | Alert | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 4.36 (0.88) | 5.00 (1.00) | 1.00 - 5.00 | 1.9 | 0.393 |
| T2 | 4.37 (0.88) | 5.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.40 (0.87) | 5.00 (1.00) | 1.00 - 5.00 | | |

The mean Alert increased from a minimum of 4.36 at the T1 timepoint to a maximum of 4.40 at the T3 timepoint. This change was not statistically significant (Friedman Test: $\chi 2 = 1.9$, $p = 0.393$).

*Figure 22: Change in Alert over time*



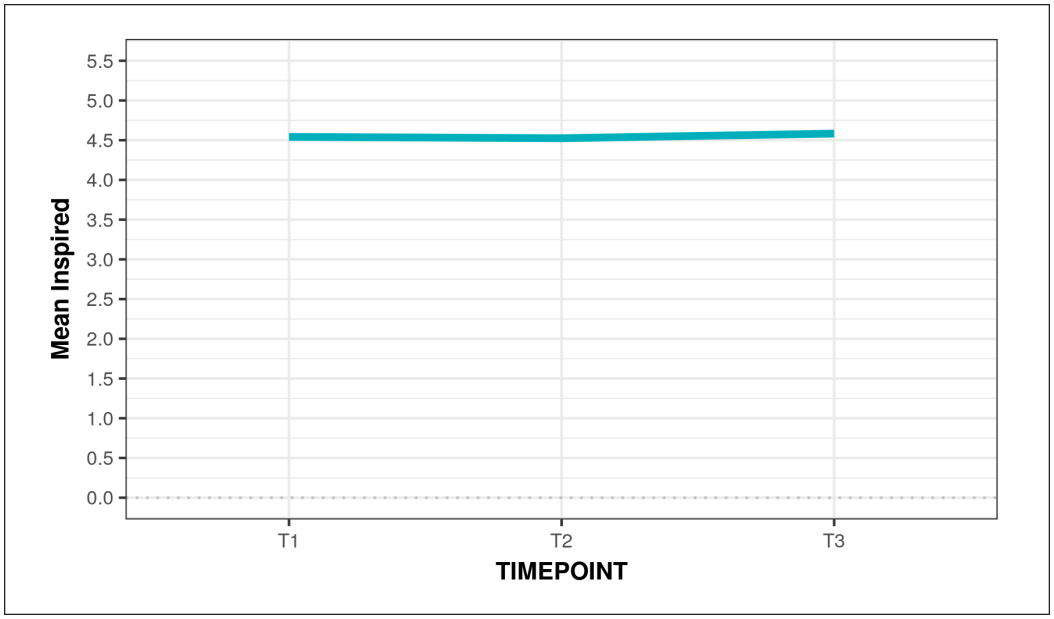
## 14)Assessment of change in Inspired over time

*Table 23: Change in Inspired over time*

| Timepoint | Inspired | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 4.54 (0.65) | 5.00 (1.00) | 2.00 - 5.00 | 2.5 | 0.287 |
| T2 | 4.53 (0.58) | 5.00 (1.00) | 3.00 - 5.00 | | |
| T3 | 4.58 (0.58) | 5.00 (1.00) | 3.00 - 5.00 | | |

The mean Inspired decreased from 4.54 at the T1 timepoint to a minimum of 4.53 at the T2 timepoint, and then increased to 4.58 at the T3 timepoint. This change was not statistically significant (Friedman Test: $\chi2 = 2.5$, $p = 0.287$).

*Figure 23: Change in Inspired over time.*



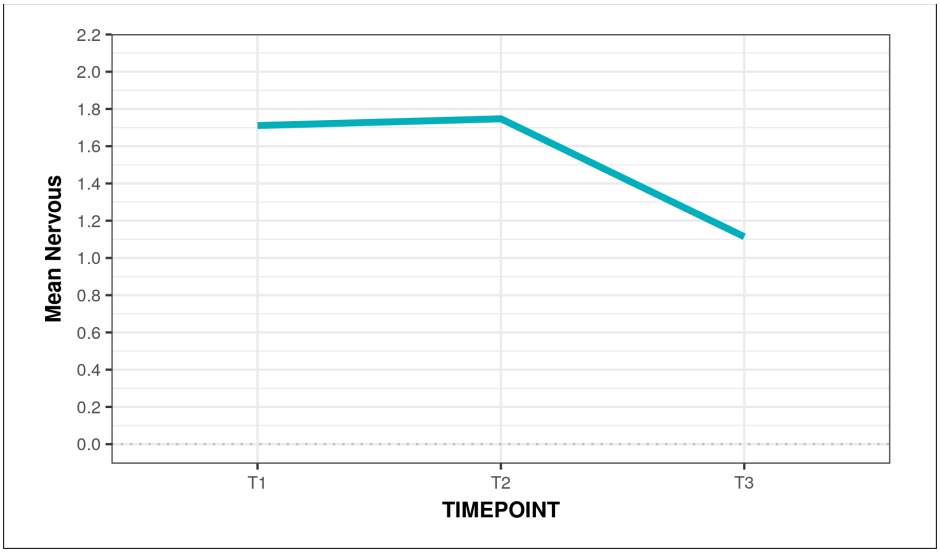

## 15)Assessment of change in Nervous over time :

*Table 24: Change in Nervous over time*

| Timepoint | Nervous | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.71 (0.95) | 1.00 (1.00) | 1.00 - 5.00 | 149.4 | <0.001 |
| T2 | 1.75 (0.97) | 1.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 1.11 (0.52) | 1.00 (0.00) | 1.00 - 5.00 | | |

The mean Nervous increased from 1.71 at the T1 timepoint to a maximum of 1.75 at the T2 timepoint, and then decreased to 1.11 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 149.4$, $p = <0.001$).

*Figure 24: Change in Nervous over time*



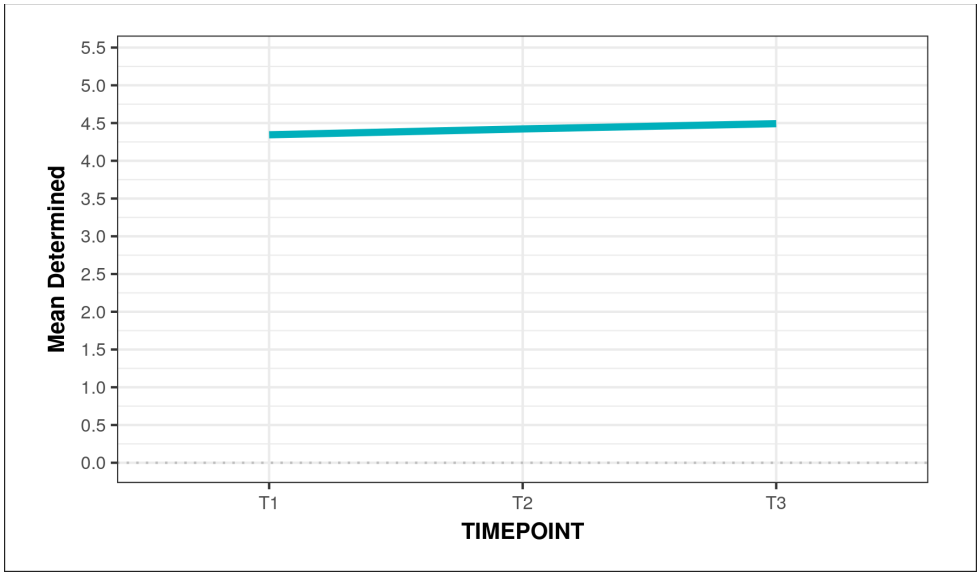

## 16)Assessment of change in Determined over time

*Table 25: Change in Determined over time.*

| Timepoint | Determined | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | $\chi 2$ | P Value |
| T1 | 4.34 (0.89) | 5.00 (1.00) | 1.00 - 5.00 | 5.3 | 0.072 |
| T2 | 4.42 (0.74) | 5.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.49 (0.78) | 5.00 (1.00) | 1.00 - 5.00 | | |

The mean Determined increased from a minimum of 4.34 at the T1 timepoint to a maximum of 4.49 at the T3 timepoint. This change was not statistically significant (Friedman Test: $\chi 2 = 5.3$, $p = 0.072$).

*Figure 25: Change in Determined over time*



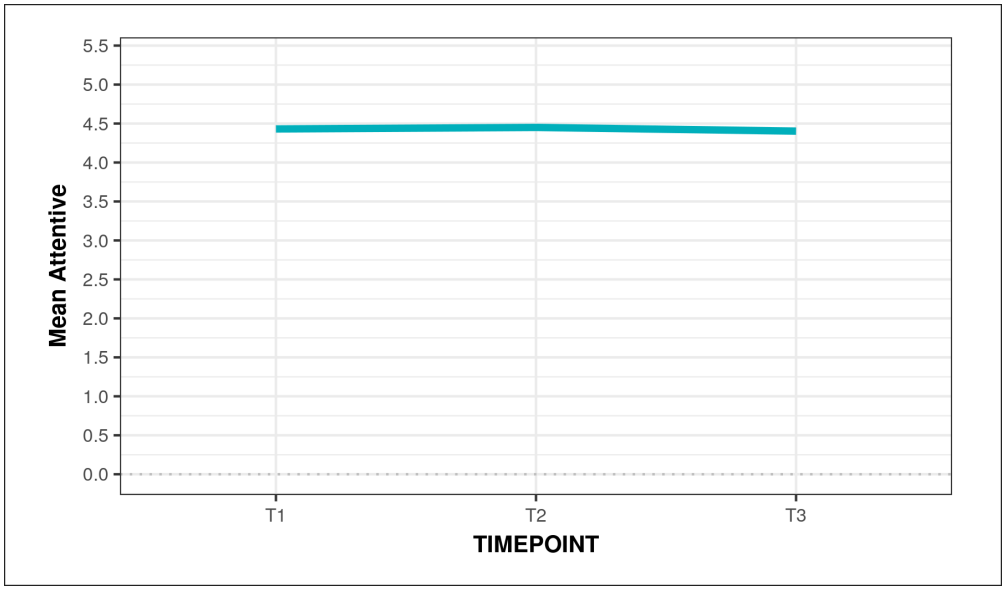
## 17)Assessment of change in Attentive over time

*Table 26: Change in Attentive over time*

| Timepoint | Attentive | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 4.43 (0.74) | 5.00 (1.00) | 1.00 - 5.00 | 0.0 | 0.984 |
| T2 | 4.45 (0.69) | 5.00 (1.00) | 2.00 - 5.00 | | |
| T3 | 4.40 (0.85) | 5.00 (1.00) | 1.00 - 5.00 | | |

The mean Attentive increased from 4.43 at the T1 timepoint to a maximum of 4.45 at the T2 timepoint, and then decreased to 4.40 at the T3 timepoint. This change was not statistically significant (Friedman Test: $\chi2 = 0.0$, $p = 0.984$).

*Figure 26: Change in Attentive over time*



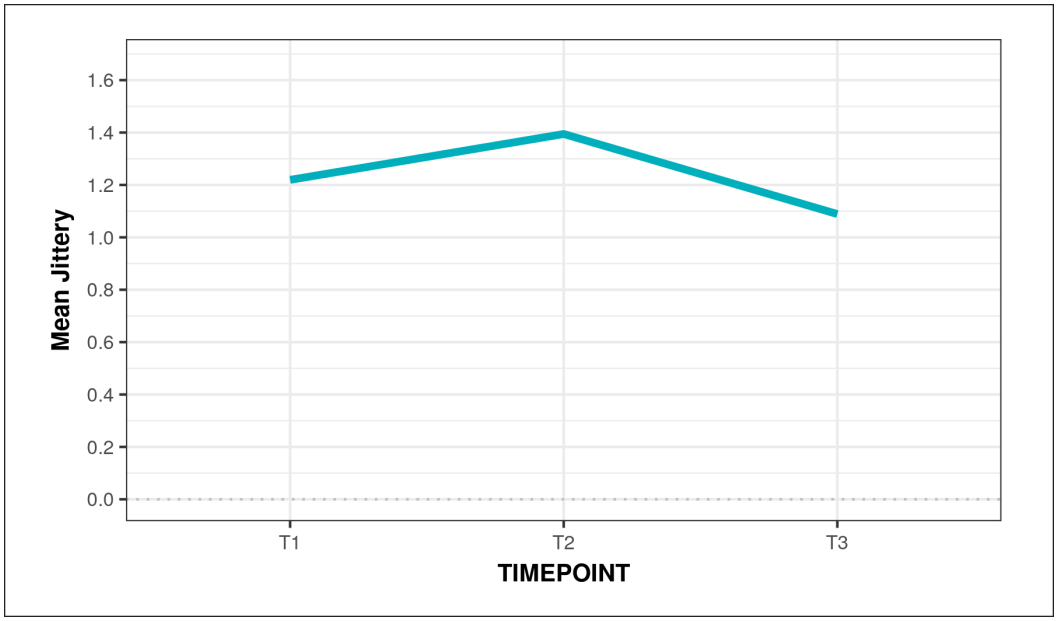

## 18) Assessment of change in Jittery over time:

*Table 27: Change in Jittery over time*

| Timepoint | Jittery | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.22 (0.60) | 1.00 (0.00) | 1.00 - 5.00 | 56.7 | <0.001 |
| T2 | 1.39 (0.77) | 1.00 (0.00) | 1.00 - 4.00 | | |
| T3 | 1.09 (0.41) | 1.00 (0.00) | 1.00 - 4.00 | | |

The mean Jittery increased from 1.22 at the T1 timepoint to a maximum of 1.39 at the T2 timepoint, and then decreased to 1.09 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 56.7$, $p = <0.001$).

*Figure 27: Change in Jittery over time*



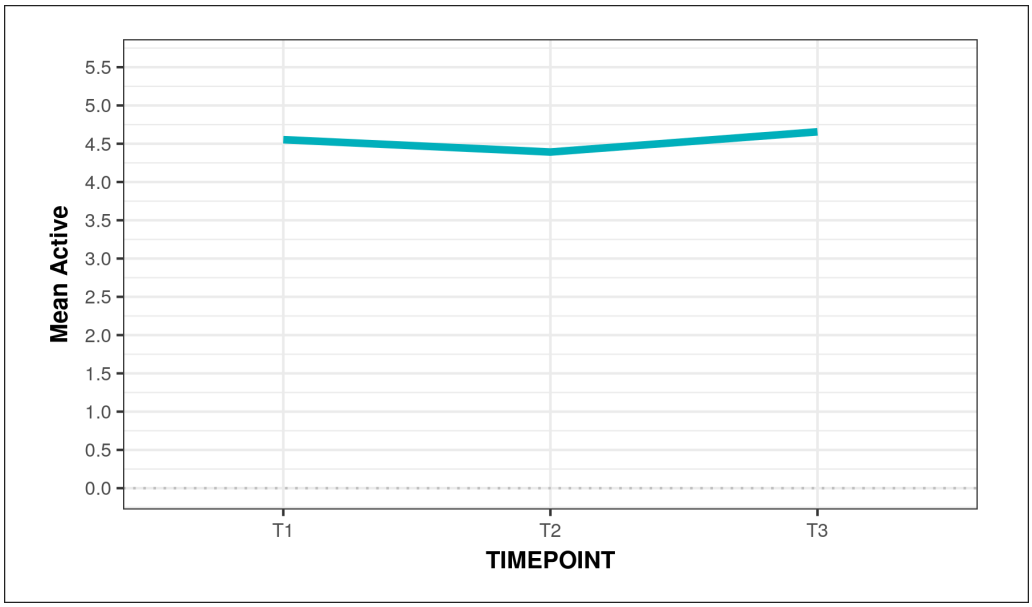

## 19)Assessment of change in Active over time

*Table 28: Change in Active over time*

| Timepoint | Active | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 4.55 (0.59) | 5.00 (1.00) | 2.00 - 5.00 | 31.0 | <0.001 |
| T2 | 4.39 (0.74) | 5.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 4.66 (0.59) | 5.00 (1.00) | 2.00 - 5.00 | | |

The mean Active decreased from 4.55 at the T1 timepoint to a minimum of 4.39 at the T2 timepoint, and then increased to 4.66 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 31.0$, $p = <0.001$).

*Figure 28: Change in Active over time*



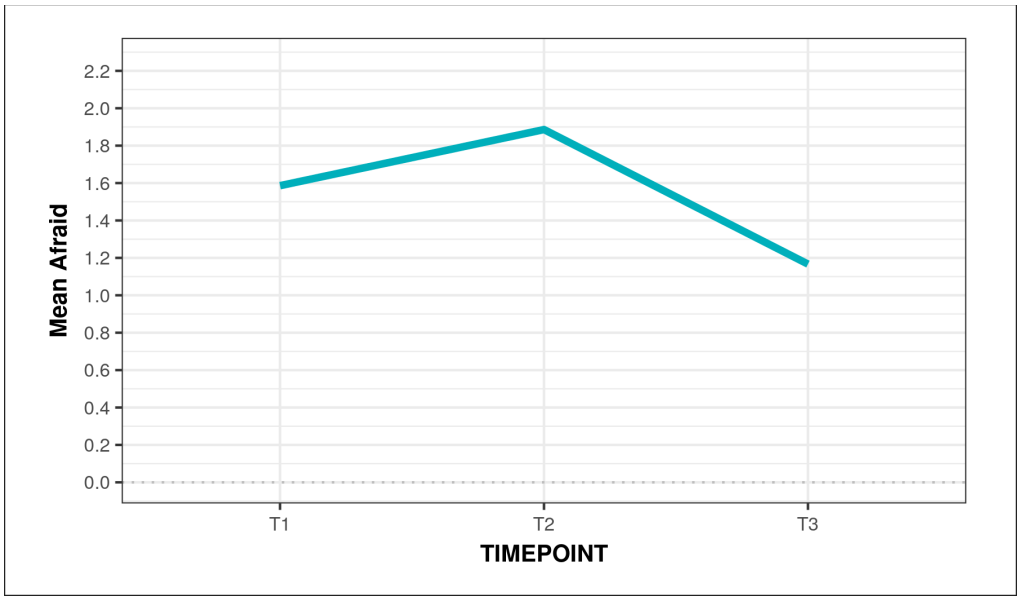

## 20) Assessment of change in Afraid over time

*Table 29: Change in Afraid over time*

| Timepoint | Afraid | | | Friedman Test | |
|---|---|---|---|---|---|
| | Mean (SD) | Median (IQR) | Range | χ2 | P Value |
| T1 | 1.59 (0.89) | 1.00 (1.00) | 1.00 - 4.00 | 158.2 | <0.001 |
| T2 | 1.89 (0.91) | 2.00 (1.00) | 1.00 - 5.00 | | |
| T3 | 1.17 (0.47) | 1.00 (0.00) | 1.00 - 4.00 | | |

The mean Afraid increased from 1.59 at the T1 timepoint to a maximum of 1.89 at the T2 timepoint, and then decreased to 1.17 at the T3 timepoint. This change was statistically significant (Friedman Test: $\chi 2 = 158.2$, $p = <0.001$).

*Figure 29: Change in Afraid over time*




Among all emotions, 15 emotions show significant changes during the donation process out of which nine emotions as Distress, Upset, Scared, Hostile, Irritable, Ashamed, Nervous, Jittery and Afraid are negative emotions and Interest, Excitement, Strength, Enthusiasm, Active and proud are the positive emotions which showed significant change.

The assessment of changes in emotions over time in different areas can be summarized as follows:

- Interested: The mean interested decreased from timepoint T1 to T2 and then increased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Distressed: The mean distressed decreased from timepoint T1. This change was statistically significant (Friedman Test: $p < 0.001$).

- Upset: The mean upset increased from timepoint T1 to T2 and then decreased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Strong: The mean strong decreased from timepoint T1 to T2 and then increased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Guilty: The mean guilty did not show a significant change over time (Friedman Test: $p = 0.804$).
- Scared: The mean scared increased from timepoint T1 to T2 and then decreased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Hostile: The mean hostile increased from timepoint T1 to T2 and then decreased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Enthusiastic: The mean enthusiastic showed a slight decrease from timepoint T1 to T2 and then increased at T3. This change was statistically significant (Friedman Test: $p = 0.002$).
- Proud: The mean proud decreased from timepoint T1 to T2 and then increased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Irritable: The mean irritable increased from timepoint T1 to T2 and then decreased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Ashamed: The mean ashamed decreased from timepoint T1 to T3. This change was statistically significant (Friedman Test: $p < 0.001$).
- Alert: The mean alert did not show a significant change over time (Friedman Test: $p = 0.393$).
- Inspired: The mean inspired did not show a significant change over time (Friedman Test: $p = 0.287$).
- Nervous: The mean nervous increased from timepoint T1 to T2 and then decreased at T3. This change was statistically significant (Friedman Test: $p < 0.001$).

- Determined: The mean determined did not show a significant change over time (Friedman Test: $p = 0.072$).

Overall, there were significant changes in several emotions over time, including interested, distressed, upset, strong, scared, hostile, enthusiastic, proud, irritable, ashamed, and nervous. However, some emotions, such as guilty, alert, inspired, and determined, did not show significant changes over time.

## ANALYSIS OF FEEDBACK FORM:

### Response to the satisfaction levels of donors:

*Table 30: Response to the satisfaction levels of donors*

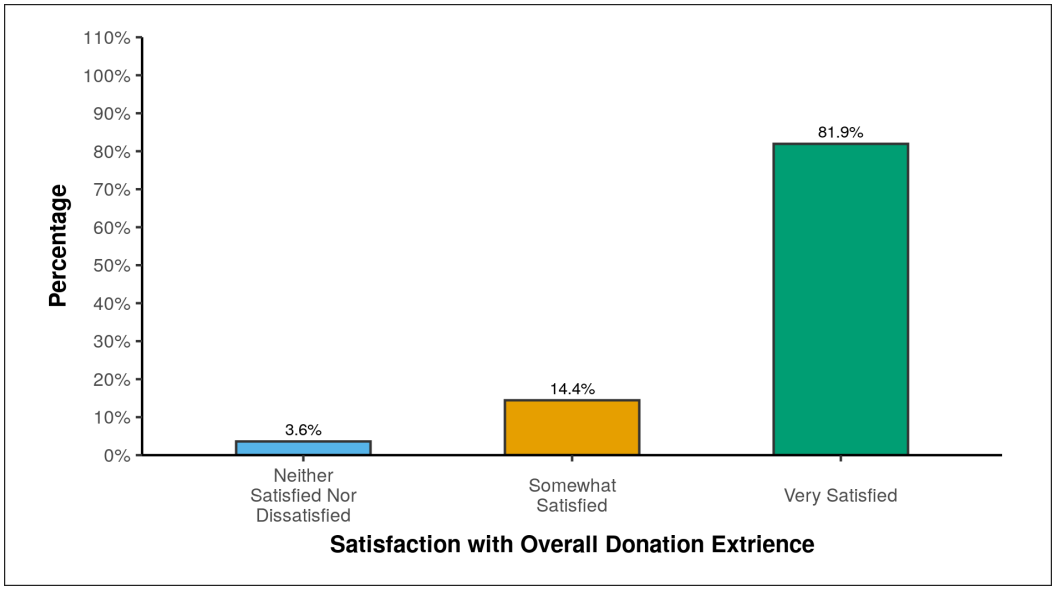
| Satisfaction with Overall Donation Experience | Frequency | Percentage | 95% CI |
|---|---|---|---|
| Neither Satisfied nor Dissatisfied | 13 | 3.6% | 2.0% - 6.3% |
| Somewhat Satisfied | 52 | 14.4% | 11.1% - 18.6% |
| Very Satisfied | 295 | 81.9% | 77.5% - 85.7% |

The table shows the response to the satisfaction levels of donors regarding their overall donation experience.

- 3.6% of donors indicated they were neither satisfied nor dissatisfied with their donation experience.
- 14.4% of donors reported being somewhat satisfied with their donation experience.
- The majority donors, 81.9%, expressed being very satisfied with their donation experience.

These results suggest that a significant proportion of donors had a positive perception of their overall donation experience, with the majority indicating high levels of satisfaction.

*Figure 30: Distribution of Satisfaction with Overall Donation Experience*




The figure represents the distribution of satisfaction with the overall donation experience among the donors. It is seen that 81.9%, reported being very satisfied with their donation experience. This indicates a high level of satisfaction among the donors. Additionally, 14.4% of donors expressed being somewhat satisfied with their donation experience, while a smaller proportion, 3.6%, indicated being neither satisfied nor dissatisfied. This suggests that the donation process was generally well-received and positively perceived by the donors.

**Distribution of the Participants in Terms of 'Would You Like To Return For Blood Donation':**

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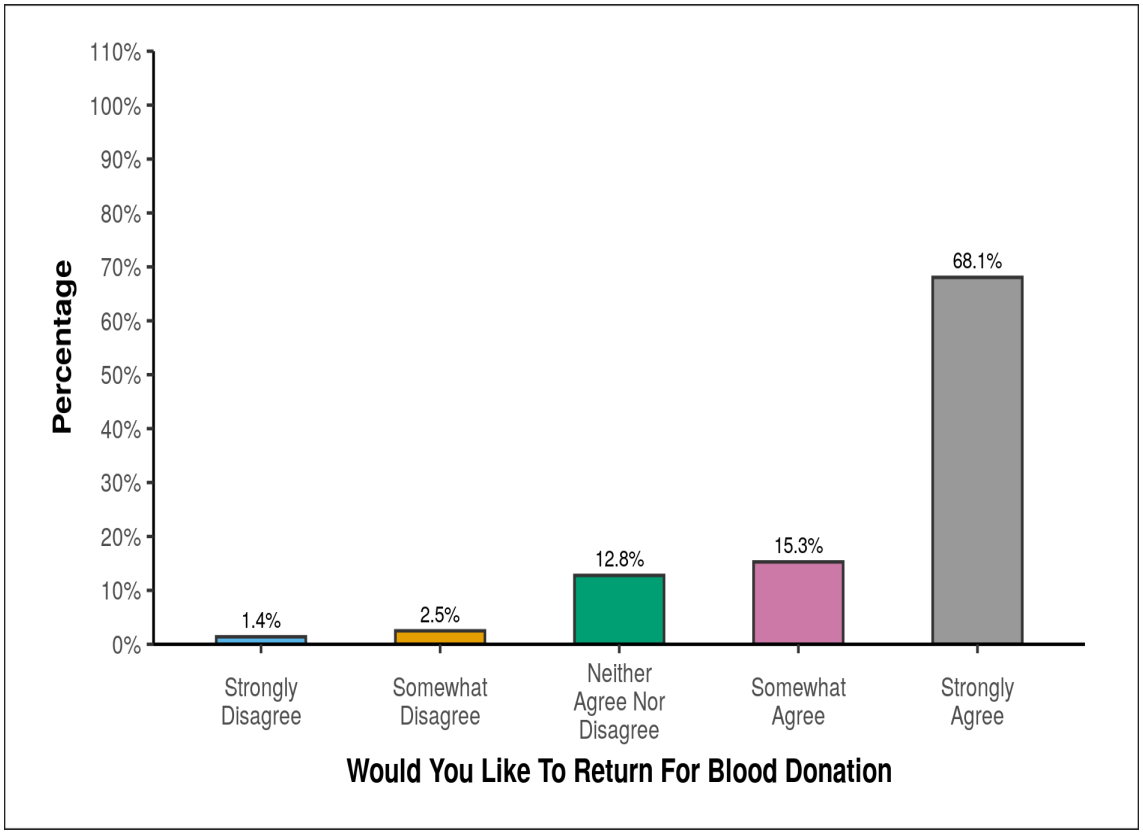
*Table 31:Distribution of the Participants in Terms of 'Would You Like To Return For Blood Donation*

| Would You Like to Return For Blood Donation | Frequency | Percentage | 95% CI |
|---|---|---|---|
| Strongly Disagree | 5 | 1.4% | 0.5% - 3.4% |
| Somewhat Disagree | 9 | 2.5% | 1.2% - 4.9% |
| Neither Agree nor Disagree | 46 | 12.8% | 9.6% - 16.8% |
| Somewhat Agree | 55 | 15.3% | 11.8% - 19.5% |
| Strongly Agree | 245 | 68.1% | 62.9% - 72.8% |

*Figure 31: Distribution of the Participants in Terms of 'Would You Like To Return For Blood Donation*



The figure represents the distribution of participants' responses to the question, "Would You Like To Return For Blood Donation?"

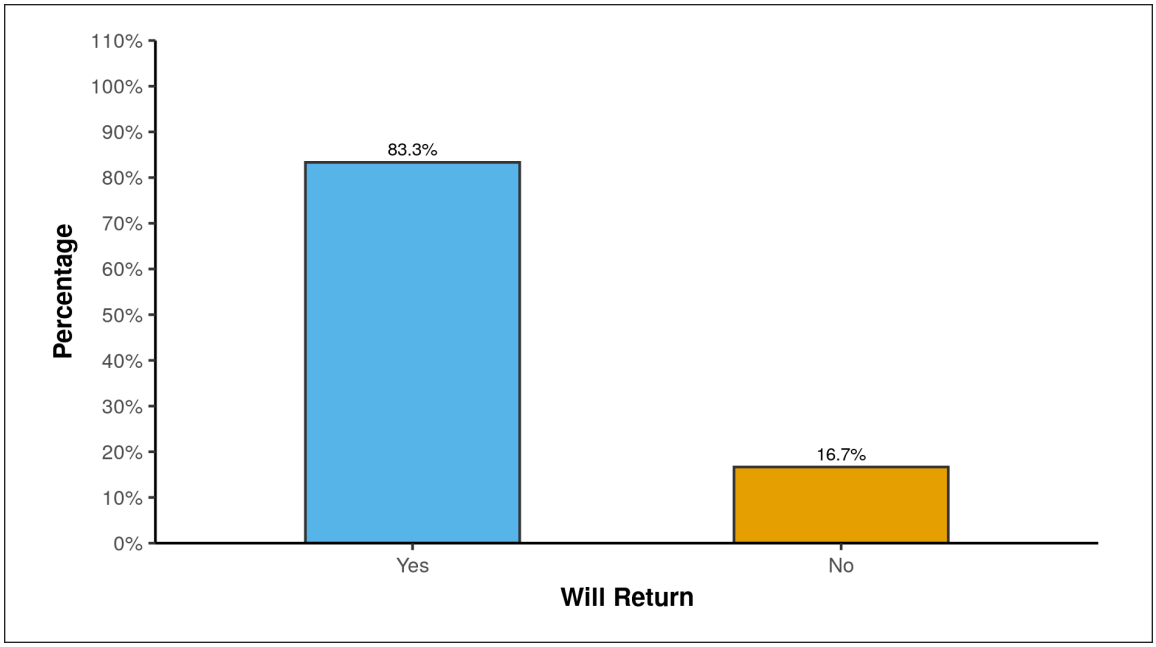
It is seen that 68.1% donors strongly agreed that they would like to return for blood donation. This indicates a high level of willing the participants to continue donating blood. Additionally, 15.3% of participants somewhat agreed, indicating a positive inclination towards returning for donation. A 12.8% of participants neither agreed nor disagreed, suggesting uncertainty or neutrality regarding their willingness to return for blood donation. 2.5% donors somewhat disagreed, and an even smaller percentage, 1.4%, strongly disagreed with the idea of returning for blood donation.

The figure visually represents these percentages, highlighting the significant number of participants who expressed a strong desire to return for blood donation. This indicates a positive response from the participants and suggests a likelihood of their continued engagement in blood donation activities.

*Table 32: Distribution of "Will Return" responders*

| Will Return | Frequency | Percentage | 95% CI |
|---|---|---|---|
| Yes | 300 | 83.3% | 79.0% - 87.0% |
| No | 60 | 16.7% | 13.0% - 21.0% |

*Figure 32: Distribution of "Will Return" responders*



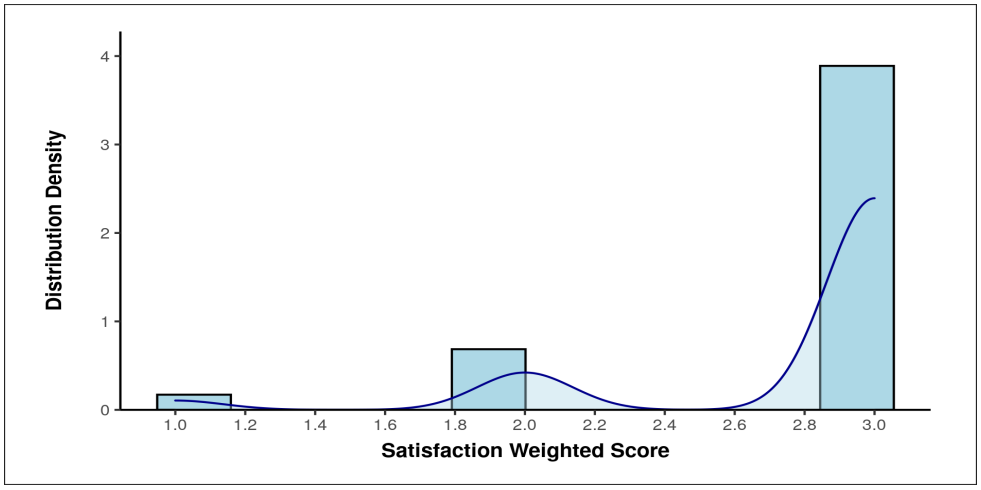

The figure illustrates the distribution of participants' responses to the question, "Will Return." According to the data, 83.3% of participants responded positively, indicating that they would return for blood donation. This high percentage suggests a strong intention among the participants to continue their engagement in blood donation activities.

On the other hand, 16.7% of participants responded negatively, stating that they would not return for blood donation. This represents a smaller proportion of participants who may have various reasons or concerns that would prevent them from participating in future blood donation sessions.

The figure visually presents these percentages, highlighting the significant number of participants who expressed a willingness to return for blood donation. This indicates a favorable response from most participants and a positive outlook for future blood donation initiatives.

## Distribution of the Participants in Terms of 'Satisfaction Weighted Score'

*Figure 33:Distribution of the Participants in Terms of 'Satisfaction Weighted Score'*




The distribution of participants' Satisfaction Weighted Score was analyzed, and the following findings were observed:

- Mean and Standard Deviation: The mean of the Satisfaction Weighted Score was 2.78, with a standard deviation of 0.49. This indicates that, on average, participants had a moderate level of satisfaction with their overall donation experience.
- Median and Interquartile Range: The median of the Satisfaction Weighted Score was 3.00, with an interquartile range of 3-3. This suggests that the majority of participants fell within this range, indicating a concentration of scores around the median value.
- Range: The Satisfaction Weighted Score ranged from 1 to 3, indicating that participants' responses were limited to this range.
- Skewness: The skewness of the data was -2.22, indicating a negative skew. This suggests that the distribution of Satisfaction Weighted Scores was skewed toward the lower end, with a long tail on the left side of the distribution.

- Kurtosis: The kurtosis of the data was 4.16, indicating a higher-than-normal peak in the distribution. This suggests the data had more outliers or extreme values than expected in a normal distribution.
- Shapiro-Wilk Test: The Shapiro-Wilk test, a test for normality, yielded a significant result ($p < 0.001$). This suggests that the data deviates from a normal distribution.
- Multimodality: The analysis suggests that the data is multimodal, meaning multiple peaks or modes exist in the distribution. This further supports the conclusion that the data does not follow a normal distribution.

The Satisfaction Weighted Score data is negatively skewed, not normally distributed, and exhibits multimodality. These findings indicate that participants' satisfaction levels were concentrated around the median value, with a more significant proportion of participants reporting lower scores. The presence of multiple modes suggests that participants' satisfaction levels were not uniformly distributed and that there may be distinct groups or factors influencing their satisfaction with the donation experience.

**Reasons ( motivations) cited by donors who were willing to return back:**

*Table 33: Reasons (motivations) cited by donors who were willing to return back*

| **Characteristic** | **N = 300 ( %)** |
|---|---|
| BLOOD CAN NOT BE SYNTHESIZED (DEMAND SUPPLY UNDERSTANDING) | 18 (6.0%) |
| FAMILY MEMBERS / FRIENDS DONATE | 9 (3.0%) |
| FEAR REMOVED AFTER DONATION | 3 (1.0%) |

| | |
|---|---|
| SELF HAPPINESS (FEELING GOOD) | 75 (25%) |
| GOOD FOR HEALTH | 24 (8.0%) |
| HELPS PEOPLE | 14 (4.67%) |
| BLOOD CENTRES PROVIDE INFORMATION ABOUT HEALTH | 2 (0.7%) |
| NO PERSONAL LOSS IN DONATING BLOOD | 3 (1.0%) |
| NOBLE ACT | 4 (1.3%) |
| SAVE LIFE | 59 (19.67%) |
| SERVE PEOPLE | 51 (17%) |
| SOCIAL IDENTITY (WANT TO GIVE PEOPLE EXAMPLE) | 10 (3.3%) |
| TO GET BLOOD WHEN I NEED IN FUTURE | 28(9.3%) |

The table provided shows the motivations or reasons cited by donors who expressed their willingness to return for blood donation in the future.

- Self-Happiness: The most common motivation cited by donors was self-happiness, with 75 donors (25% of the total) expressing that they would return because donating blood made them feel good personally.
- Save Life: The second most common motivation cited by donors was the opportunity to save lives. Fifty-Nine donors (19.6%) mentioned this as their reason to return.

- Serve People: Another important motivation was the desire to serve people. A total of 51 donors (17%) expressed their willingness to return because they saw donating blood as a noble way to help others.
- To get blood in future when I need: 9.3% donors expressed this with respect to own future benefit.
- For better donor Health: Twenty-four donors (8% of the total) mentioned better donor health as a motivation to return, suggesting that they believed blood donation had health benefits for themselves.
- Demand-Supply Understanding: Some donors (18 donors, 6.0% of the total) expressed their motivation to return based on their understanding of the demand and supply of blood, emphasizing that blood cannot be synthesized and the need for voluntary donors.
- Social Identity: A smaller proportion of donors mentioned motivations related to social identity, wanting to set an example (10 donors, 3.3% of the total)
- Other Motivations: The table also includes various other motivations cited by a smaller number of donors, such as I would donate because my family members, or friends also donate (peer influence),fear removal, blood donations provide information about health, and the possibility of receiving blood when in need.

The data thus suggest that the primary motivations for donors willing to return for blood donation in the future are related to personal satisfaction, serving others, and the belief in saving lives. Understanding the demand and supply dynamics of blood and the potential health benefits of donation is also mentioned by a portion of the donors.

## ANALYSIS OF CHANGE IN EMOTIONS WITH RESPECT OF DONOR RETURN:

### Performance of different emotions for prediction of whether donor would return or not:

*Table 34:Performance of different emotions for prediction of whether donor would return or not*

| Predictor (T1 to T3) | AUROC | 95% CI | P | Sn | Sp | PPV | NPV | DA |
|---|---|---|---|---|---|---|---|---|
| Change in Interested | 0.515 | 0.45-0.58 | 0.685 | 20% | 87% | 88% | 18% | 31% |
| Change in Distressed | 0.517 | 0.444-0.59 | 0.628 | 92% | 13% | 84% | 24% | 79% |
| Change in Excited | 0.520 | 0.45-0.589 | 0.610 | 38% | 70% | 86% | 18% | 43% |
| Change in Upset | 0.551 | 0.489-0.613 | 0.112 | 21% | 87% | 89% | 18% | 32% |
| Change in Strong | 0.558 | 0.483-0.632 | 0.126 | 35% | 73% | 87% | 18% | 41% |
| Change in Guilty | 0.515 | 0.486-0.544 | 0.504 | 6% | 100% | 100% | 18% | 22% |
| Change in Scared | 0.507 | 0.432-0.582 | 0.848 | 94% | 8% | 84% | 21% | 79% |
| Change in Hostile | 0.513 | 0.442-0.584 | 0.704 | 90% | 13% | 84% | 22% | 78% |
| Change in Enthusiastic | 0.507 | 0.433-0.581 | 0.855 | 8% | 93% | 86% | 17% | 22% |

| Predictor (T1 to T3) | AUROC | 95% CI | P | Sn | Sp | PPV | NPV | DA |
|---|---|---|---|---|---|---|---|---|
| Change in Proud | 0.540 | 0.478-0.603 | 0.239 | 24% | 85% | 89% | 18% | 34% |
| Change in Irritable | 0.526 | 0.48-0.572 | 0.372 | 13% | 95% | 93% | 18% | 27% |
| Change in Alert | 0.503 | 0.429-0.577 | 0.946 | 7% | 98% | 95% | 17% | 22% |
| Change in Ashamed | 0.532 | 0.503-0.562 | 0.141 | 9% | 98% | 97% | 18% | 24% |
| Change in Inspired | 0.505 | 0.432-0.578 | 0.897 | 4% | 100% | 100% | 17% | 20% |
| Change in Nervous | 0.549 | 0.471-0.627 | 0.193 | 47% | 65% | 87% | 20% | 50% |
| Change in Determined | 0.502 | 0.425-0.579 | 0.961 | 11% | 92% | 87% | 17% | 24% |
| Change in Attentive | 0.523 | 0.449-0.597 | 0.548 | 75% | 28% | 84% | 18% | 67% |
| Change in Jittery | 0.516 | 0.468-0.565 | 0.555 | 15% | 90% | 88% | 17% | 27% |
| Change in Active | 0.527 | 0.452-0.602 | 0.465 | 83% | 23% | 84% | 22% | 73% |
| Change in Afraid | 0.504 | 0.435-0.574 | 0.909 | 10% | 93% | 88% | 17% | 24% |

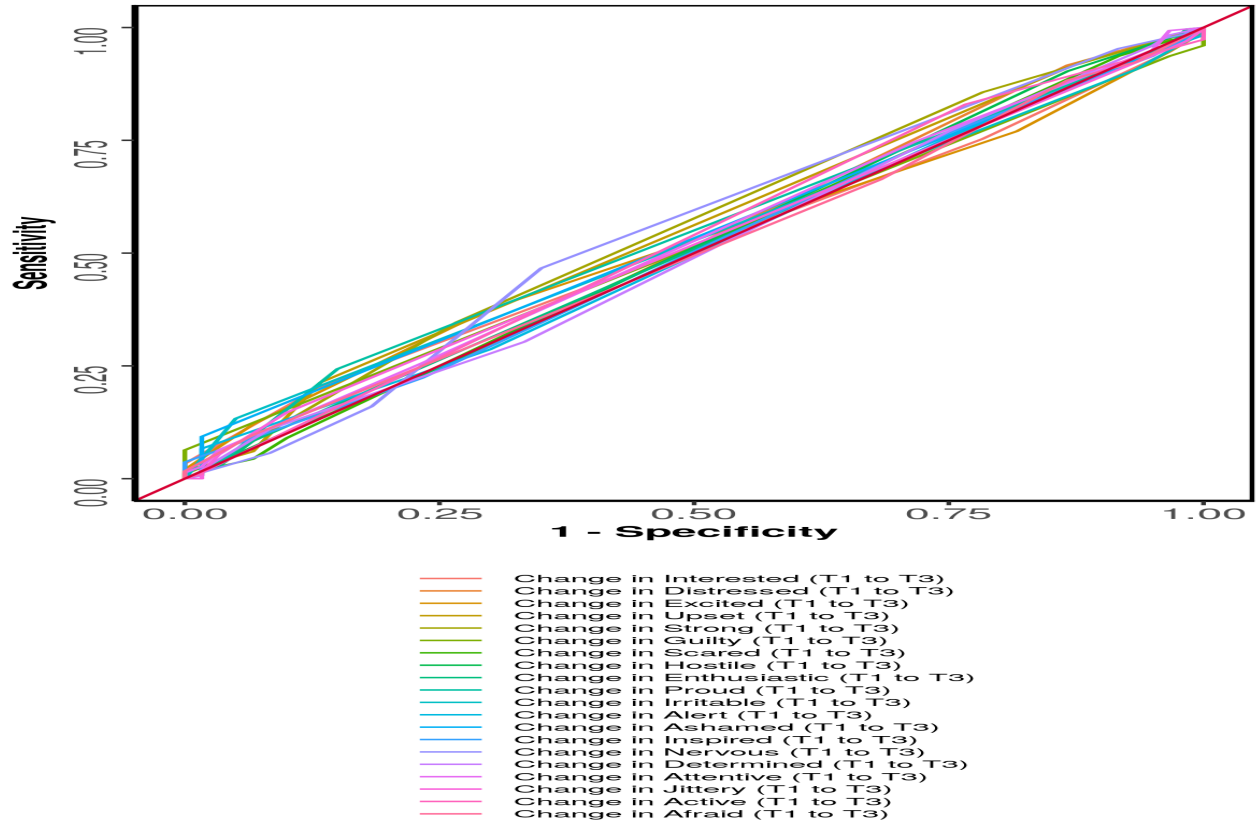
*AUROC: Area under ROC curve; CI: Confidence interval; P: P value; Sn: Sensitivity; Sp: Specificity; PPV: Positive predictive value; NPV: Negative predictive value; DA: Diagnostic Accuracy*

Based on the analysis, it seems that the change in emotions can be used as predictors for predicting whether a donor would return or not. Here are some key observations:

1. Sensitivity: The emotions that have the highest sensitivity for predicting future donor return are change in scared, change in distressed, and change in hostile. This means that these emotions show a higher proportion of correctly identifying donors who would return.
2. Positive Emotions: Among positive emotions, change in active followed by change in attentive have better sensitivity in predicting donor return. This suggests that an increase in these positive emotions may indicate a higher likelihood of donor return.
3. Specificity and Positive Predictive Value: Change in guilty and change in inspired have the best performance in terms of specificity and positive predictive value. This means that these emotions are more specific in identifying donors who would not return and have a higher probability of correctly predicting future donor return when they are present.
4. Negative Predictive Value: Change in distressed has the best negative predictive value. This indicates that when there is a decrease in distress, it is more likely that the donor will return.
5. Diagnostic Accuracy: Change in distressed and change in scared have the best diagnostic accuracy. This means that these emotions overall provide a better overall performance in predicting future donor return.

**ROC Curve Analysis Showing Diagnostic Performance of Change in different emotions (T1 to T3) in Predicting donor return (n = 360):**

*Figure 34: ROC Curve Analysis Showing Diagnostic Performance of Change in different emotions (T1 to T3) in Predicting donor return*


Sensitivity
0.00
0.25
0.50
0.75
1.00
1 - Specificity
Change in Interested (T1 to T3)
Change in Distressed (T1 to T3)
Change in Excited (T1 to T3)
Change in Upset (T1 to T3)
Change in Strong (T1 to T3)
Change in Guilty (T1 to T3)
Change in Scared (T1 to T3)
Change in Hostile (T1 to T3)
Change in Enthusiastic (T1 to T3)
Change in Proud (T1 to T3)
Change in Irritable (T1 to T3)
Change in Alert (T1 to T3)
Change in Ashamed (T1 to T3)
Change in Inspired (T1 to T3)
Change in Nervous (T1 to T3)
Change in Determined (T1 to T3)
Change in Attentive (T1 to T3)
Change in Jittery (T1 to T3)
Change in Active (T1 to T3)
Change in Afraid (T1 to T3)

- Although Best parameter in terms of AUROC is change in "Strong" emotion, no parameter is significant to predict future donor return since the closer the curve is located to upper-left hand corner and the larger the area under the curve, the better the test is at discriminating between return and non-return behavior of a blood donor.

It is seen that none of the parameters have a significant area under the ROC curve (AUROC). This suggests that no single emotion change alone is highly accurate in predicting donor return.

It may thus require considering multiple emotions or additional factors to improve the predictive ability.

## DISCUSSION

The focus of our study was to analyse the emotional profile of first-time Whole Blood donors and understand the factors that contribute to their likelihood of returning to donate again. We aimed to determine the strength of various positive and negative emotions experienced by donors at different areas of the donation process.

To conduct the study, we approached 490 first-time Whole Blood donors 461 of them provided consent for participation.97 donors were deferred during screening and medical examination. We had four dropouts (donors who discontinued participation in data collection during the process) across all three donation stations.We collected complete data from 360 donors.

The mean age of the donors in our study was 28 years, indicating a need to target first-time donors at an earlier stage. Males constituted the majority, accounting for 96.7% of the donor population, while females comprised only 3.3%.

Our donor population was primarily from urban areas, followed by nonurban areas. Nonurban areas are locations that do not classify themselves as villages but have limited access to city infrastructure or nearby Blood centres. Rural populations also contributed to our donor population.

Among the educational backgrounds of our donors, graduates had the highest representation, followed by individuals with a higher secondary education. This suggests that our study was well understood by a significant portion of our donor population.

The emotional profile of blood donors was studied using the Positive and Negative Affect Schedule (PANAS) scale, which consists of 10 positive and 10 negative emotions. The distribution of PANAS scores across the waiting, donation, and refreshment areas provided valuable insights into the emotional experiences of blood donors throughout the different stages

of their donation process. The study found that positive emotions significantly outweighed negative emotions in all three sections of the donation process

1. **WAITING AREA**

In the waiting area, the predominant emotions reported by blood donors were Active, Proud, Interested, Inspired, and Alert. These emotions reflect a positive emotional state among donors, indicating their active engagement, a sense of pride, genuine interest, inspiration, and alertness. These findings suggest that donors approach the blood donation process enthusiastically, motivated, and attentively.

Notably, these positive emotions, such as feeling active, proud, interested, inspired, and alert, were reported by a high percentage of donors, ranging from 90% to 98.33%. This indicates a consistent emotional pattern among donors in the waiting area, suggesting that the environment and the anticipation of the donation process may contribute to these positive emotions.

On the other hand, among the negative emotions, Afraid and Nervous were the most prominent, but their percentages were considerably lower than the positive ones. Approximately 7.78% of donors reported feeling afraid, while 6.67% reported feeling nervous in the waiting area. These findings imply that a few donors may experience anxiety or apprehension before the donation process.

The low percentages of negative emotions, such as Scared, Distressed, Hostile, Upset, Ashamed, Jittery, Guilty, and Irritable, indicate that these emotions were less prevalent among the donors in the waiting area.

Overall, the emotional profile of donors in the waiting area reflects a predominantly positive emotional state, with positive emotions being more prevalent than negative ones. These

findings suggest that creating a supportive and comfortable environment in the waiting area, along with effective communication and information about the donation process, may enhance positive emotions and alleviate negative emotions among donors.

## 2. DONATION PROCESS

During the donation process, the predominant emotions reported by blood donors were Inspired, Attentive, and Proud. These emotions indicate a heightened focus, concentration, and a sense of purpose among donors during the actual donation. Donors reported feeling inspired, possibly indicating a solid motivation to contribute to the cause and make a positive impact. Additionally, the emotions of attentiveness and pride suggest that donors were fully engaged and had a sense of accomplishment in their donation.

The intensity of these positive emotions is reflected in the high percentages reported, ranging from 80.28% to 95.56%. These findings suggest that the act of donation itself evokes positive emotional experiences and a sense of fulfilment among donors.

Among the negative emotions, Scared and Nervous remained the most intense during the donation process. This indicates that a portion of donors experienced anxiety or fear while undergoing the donation procedure. It is worth noting that the intensity of Jittery increased during the donation stage compared to the waiting area, suggesting that the donation process itself may contribute to a heightened sense of fear and apprehension in donors, indicating a potential area for improvement to encourage donor return.

The low percentages of negative emotions such as Irritable, Distressed, Hostile, Afraid, Jittery, Upset, Guilty, and Ashamed indicate that these emotions were less prevalent during the donation process. This suggests that, overall, donors maintained a relatively positive emotional state during the donation, despite the presence of some negative emotions.

These findings highlight the importance of creating a supportive and calming environment during the donation process to address the concerns and anxieties that donors may experience. Clear information, guidance, and reassurance can help alleviate negative emotions and enhance positive emotional experiences during donation.

### 3. POST DONATION

After the donation process, the predominant emotion reported by blood donors was a feeling of being strong. This suggests that donors experienced a sense of physical and emotional well-being, possibly attributed to the donation itself. The high percentage of 100% indicates that this emotion was universally reported among donors in the refreshment area.

Other positive emotions such as Proud, Active, Interested, Inspired, Determined, Alert, Enthusiastic, and Attentive remained intense after donation, ranging from 91.11% to 98.61%. These emotions indicate a continued sense of accomplishment, satisfaction for having contributed to saving lives and positive affect among donors even after completing the donation process. Donors reported feeling proud and active, suggesting continued fulfilment and energy. The emotions of interest and inspiration indicate ongoing engagement and motivation in the cause of blood donation.

Negative emotions, on the other hand, dropped in intensity after the donation. This suggests a shift towards more positive emotional experiences and an overall improvement in affect among donors. Guilt, upset, hostility, irritability, nervousness, fear, jitters, distress, fear, and shame were reported at lower percentages, ranging from 0% to 3.33%. This indicates a decrease in the prevalence and intensity of these negative emotions in the refreshment area compared to the previous stages.

The findings indicate that the refreshment area, where donors can relax and replenish their energy, contributes to a more positive emotional state. The donation and the support received in the refreshment area may alleviate negative emotions and enhance positive emotions.

## 4. TRAJECTORY

Emotional trajectories refer to the changes in emotional experiences and states over time.

The emotional trajectories identified in the study reveal essential insights into donors' experiences throughout the blood donation process. These trajectories highlight the dynamics and changes in emotional states over time. Here is a summary of the emotional trajectories observed in the study:

1. Interest: Donors maintained a generally high level of interest throughout the process. However, there was a slight decrease in interest during the donation stage compared to the waiting and refreshment stages. This suggests that donors may experience fluctuations in their engagement and curiosity as they progress through different stages of the donation process.
2. Distress: Distress levels were generally low, indicating that donors experience minimal negative emotions overall. However, there was a slight increase in distress during the donation stage. This suggests that donating blood may induce temporary stress or discomfort in donors.
3. Excitement and Strength: Donors consistently felt excited and strong throughout the process. However, there was a slight decrease in these emotions during the donation stage. This could be attributed to the physical and psychological demands of the donation process, which may temporarily reduce the feelings of excitement and strength.

4. Upset: Feelings of being upset was minimal during the donation process, with a slight decrease observed during the donation stage. This indicates that donors generally maintain a positive emotional state and experience minimal upset throughout the donation process.
5. Guilt: Guilt was generally low throughout the process but showed a slight increase during the refreshment stage. This suggests that donors may experience fleeting guilt related to receiving refreshments or benefits after donating blood.
6. Fear and Nervousness: Donors reported the highest levels of fear and nervousness during the donation stage, the waiting stage, and the lowest levels during the refreshment stage. This indicates that donating blood induces significant fear and nervousness in donors, which gradually subsides as they progress.
7. Enthusiasm: Enthusiasm remained high throughout the process, with a slight decrease observed during the donation stage. This indicates that donors maintain positive and enthusiastic emotions, although there may be a temporary dip in enthusiasm during the donation process.
8. Pride: Donors feel a sense of pride throughout the donation process, with a slight increase observed during the refreshment stage. This suggests that donors experience a positive emotional trajectory related to feelings of pride, possibly influenced by contributing to a worthy cause.

These emotional trajectories provide valuable insights into the complex and dynamic nature of donors' emotional experiences during blood donation.

## 5. FEEDBACK

The analysis of the feedback form provides valuable insights into the satisfaction levels of donors and their motivations to return for blood donation.

The satisfaction levels of donors with the overall donation experience indicate a high level of satisfaction. The majority of donors, 295 (81.9%), reported being very satisfied with their donation experience. This positive feedback suggests that the blood canter has been thriving in meeting the expectations and needs of the donors, creating a positive and satisfactory environment for blood donation. Only a small percentage of donors, 13 (3.6%), expressed a neutral stance, indicating an opportunity for improvement in meeting their expectations. However, overall, the satisfaction levels reported by donors indicate a positive perception of their donation experience.

The willingness of donors to return for blood donation further supports the positive satisfaction levels reported. A significant majority, 245 (68.1%), strongly agreed that they would like to return for blood donation. An additional 55 (15.3%) somewhat agreed, indicating a favourable inclination toward future donations. These findings suggest that the blood canter has been thriving in fostering a positive donor experience that motivates donors to continue contributing. However, it is essential to address the small percentage of donors who expressed disagreement or neutrality, as their feedback can provide valuable insights into areas for improvement.

The Satisfaction Weighted Score, with a mean of 2.78 and a median of 3.00, also indicates a relatively high level of satisfaction among donors. The multimodal distribution suggests that different groups of donors had varying levels of satisfaction, potentially influenced by different factors.

The motivations cited by donors who expressed their willingness to return for blood donation in the future reveal several key themes. Self-happiness emerged as the most prominent motivation, with 67 (22%) donors expressing their personal satisfaction as a driving factor. This indicates that the act of donating blood contributes to donors' own well-being and sense of fulfilment. Serving people and saving lives were also cited as essential motivations, with 51

(17%) and 42 (14%) donors mentioning these aspects, respectively. These motivations reflect the altruistic nature of blood donation, emphasizing donors' desire to make a positive impact on the lives of others. Additionally, motivations related to health benefits, being informed about health, and other reasons with lower frequencies indicate that donors perceive blood donation as a means to maintain their own health and gain knowledge about their well-being.

The analysis of the feedback form thus reveals a high level of satisfaction among donors with the overall donation experience, as indicated by their satisfaction levels, willingness to return, and the Satisfaction Weighted Score. The motivations cited by donors highlight the importance of personal satisfaction and serving.

## 6 - DONOR RETURN

The analysis indicates that changes in emotions can provide insights into predicting whether a donor would return.

- Sensitivity is essential for identifying emotions that correctly identify donors who would return. In this analysis, changes in scared, distressed, and hostile emotions demonstrated the highest sensitivity. This suggests that when there is a noticeable change in these negative emotions, there is a higher likelihood of correctly identifying donors who would return for future donations.
- Positive emotions also play a role in predicting donor return. Changes in active and attentive emotions exhibited better sensitivity in predicting donor return. An increase in these positive emotions may indicate a higher probability of donor return, suggesting that a positive emotional experience during the donation process is associated with the intention to return.

- Specificity and positive predictive value are crucial in identifying donors who are less likely to return. In this analysis, changes in guilty and inspired emotions showed the best performance regarding specificity and positive predictive value. When these emotions were present, it indicated a higher probability of correctly predicting that the donor would not return.
- The negative predictive value represents the likelihood of correctly identifying donors who would not return. Change in distressed emotion had the best negative predictive value, implying that a decrease in distress indicates a higher probability of future donor return.
- Diagnostic accuracy provides an overall measure of the performance of emotions in predicting donor return. In this analysis, change in distress and fear emotions demonstrated the best diagnostic accuracy. When considered together, these emotions showed a higher overall performance in predicting future donor returns.

It is important to note that while certain emotions show associations with donor return, the analysis did not find a significant area under the ROC curve (AUROC) for any single emotion change. This suggests that relying on a single emotion change alone may not accurately predict donor return. It may be necessary to consider multiple emotions or incorporate additional factors such as demographic information, previous donation history, or other relevant variables to improve the predictive ability.

Moreover, it is essential to recognize the limitations of using self-reported emotions as predictors. Emotions can be subjective and influenced by various factors, making it challenging to capture their true dynamics accurately. Future research could explore the potential of combining emotional data with other variables and employing more sophisticated predictive modeling techniques to enhance the accuracy and robustness of the predictive models.

## SUMMARY:

The present study was conducted at All India Institute of Medical Sciences, Bhopal with the aim of studying the emotional profile of first-time whole blood donors and the impact of emotional trajectories over feedback for donor return. A longitudinal study was implemented in which after excluding repeat donors, donors who did not want to participate in the study, medically unfit donors and drop outs from the study, 360 donors were subjected to PANAS Scale at three time points (areas ) i.e., before , during and after the whole blood donation. Donor return was measured by using a Likert scale based 5 response question. The data was analysed in terms of demographical details, identification of intensity of 10 positive and 10 negative emotions at 3 different areas of blood collection facility , and correlating them as a predictor of donor return.

The study analyzed the emotional profile of blood donors throughout the donation process using the Positive and Negative Affect Schedule (PANAS) scale.

The findings revealed that positive emotions outweighed negative emotions in all three stages: waiting, donation, and post-donation. In the waiting area, donors reported active, proud, interested, inspired, and alert emotions, indicating enthusiasm and engagement. Negative emotions such as afraid and nervous were present but reported by a smaller percentage of donors.

During the donation process, donors felt inspired, attentive, and proud, reflecting focus and a sense of purpose. However, scared and nervous emotions were more intense during this stage, suggesting some anxiety among donors. Positive emotions remained dominant, while negative emotions like irritability and distress were less prevalent.

After donation, donors reported feeling strong, proud, active, interested, inspired, determined, alert, enthusiastic, and attentive. Negative emotions decreased significantly, indicating a shift towards more positive emotional experiences. The refreshment area played a role in enhancing positive emotions and alleviating negative ones.

The study identified several emotional trajectories: interest remained high throughout, distress increased slightly during donation, excitement and strength decreased during donation, upset was minimal, guilt slightly increased in the refreshment stage, fear and nervousness were highest during donation, enthusiasm remained high, and pride increased in the refreshment area.

Feedback from donors indicated a high level of satisfaction with the donation experience, and the majority expressed a willingness to return for future donations. Major motivations to return included personal satisfaction, serving people, and saving lives.

The analysis revealed that changes in emotions could help predict donor return. Sensitivity was highest for changes in scared, distressed, and hostile emotions, suggesting they can identify donors likely to return. Positive emotions like active and attentive also predicted donor return, while changes in guilty and inspired emotions were indicative of lower likelihood to return. Decreased distress had the best negative predictive value.

It is important to note that relying on a single emotion may not accurately predict donor return because the AOC is statistically not significant. Considering multiple emotions or other variables is necessary to improve predictive ability.

In summary, the study highlights the predominantly positive emotional state of blood donors throughout the donation process. Creating a supportive environment, providing information, and addressing anxieties can enhance positive emotions. Donor satisfaction levels were high, and motivations for return included personal fulfillment and altruistic reasons. Changes in emotions showed associations with donor return, but incorporating other variables is crucial for accurate prediction. Overall, the study provides valuable insights for improving the donor experience and predicting donor return.

**STRENGTHS OF THE STUDY:**

- Use of trajectory-based analysis for identifying change in emotions
- Use of PANAS scale for identifying emotions which is validated in Hindi as well.
- Longitudinal study design provided live tracking of donor emotions in contrast to most common retrospective studies.
- First time study in India with coverage of donors from various sociodemographic situations.
- Coverage of emotions of blood donors with under collection and donor reactions which makes it first time of this type.
- Attempt to assess separate emotions as a 'prediction tool' for donor return.

**LIMITATIONS OF STUDY:**

- Long and time-consuming process of data collection with respect to ease of blood donors
- Length of PANAS scale being not very convenient in terms of targeting relevance of emotions of blood donors.
- Relatively small sample size to get adequate results for 'within group'-based trajectory analysis.
- Inability to cover illiterate donors and hence missing out their emotional experience.
- Use of feedback question for predicting return of blood donor instead of using actual follow up of the same donors over the period.
- Social desirability bias: Even after taking adequate measures like assurance to maintain confidentiality, explaining importance of honest responses, this bias is inevitable up to some extent.

## CONCLUSION:

Aim of the present study was to study the emotional profile of first-time whole blood donors and the impact of emotional trajectories over feedback for donor return. It was found that variations in the negative emotions are more sensitive than positive emotions in deciding future return. Even though single emotion may not be statistically significant as a sole predictor of donor return, ‘changes’ in certain emotions like distress, hostile, scared in different areas of blood collection facility donation process are significant.

## FUTURE SCOPES:

Although our study identified changes in the various emotions and corelating them with possible donor return by using donor feedback, it did not correlate with true return rate by using follow up at 3-4 months,6 months and 1 year. Also, we need future research that can study same in Indian context as well as different geographical context since the place of residence, socioeconomic class, education level, culture, and upbringing and many more factors decide cognition of a blood donor, may play role in deciding their emotional experiences, motivations, obstacles, and beliefs about blood donation.

In future studies, tool for donor's emotion marking can be developed manually and validated with more concise and relevant emotions in terms of blood donation.

While our study is longitudinal, it would be important to put emphasis on formation of the strategies that can focus on the emotions of whole blood donors. Specifically, Strategies that selectively target on negative emotions like feeling hostile, scared, and distressed throughout donation process. For that certain stress reduction techniques have been studied like applied muscle tension and audio- visual distraction.(33)(34)

Other than relaxation techniques and social support, psychological interventions like Attentional deployment and reinterpretation are cognitive strategies that can be used to regulate emotions. They have been applied in various contexts to help individuals manage and reduce negative emotions.(35) While they have not been specifically studied in the context of blood donors, it is possible that they could be beneficial in reducing negative emotions associated with blood donation and reframing the experience of blood donation in a more positive light. For example, donors could focus on the potential impact their donation may have on someone's life or view the temporary discomfort as a meaningful sacrifice for a greater cause. Further research would be needed to decide their efficacy and potential use in future.

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**ANNEXURE 1**

**PANAS Scale (Positive & Negative Affect Schedule)**

**This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word.**

**1)Not at all 2) A little 3)Moderately 4)quite a bit 5) extremely**

| | | | | | |
|---|---|---|---|---|---|
| **INTERESTED** | **1** | **2** | **3** | **4** | **5** |
| **DISTRESSED** | **1** | **2** | **3** | **4** | **5** |
| **EXCITED** | **1** | **2** | **3** | **4** | **5** |
| **UPSET** | **1** | **2** | **3** | **4** | **5** |
| **STRONG** | **1** | **2** | **3** | **4** | **5** |
| **GUILTY** | **1** | **2** | **3** | **4** | **5** |
| **SCARED** | **1** | **2** | **3** | **4** | **5** |
| **HOSTILE** | **1** | **2** | **3** | **4** | **5** |
| **ENTHUSIASTIC** | **1** | **2** | **3** | **4** | **5** |
| **PROUD** | **1** | **2** | **3** | **4** | **5** |
| **IRRITABLE** | **1** | **2** | **3** | **4** | **5** |
| **ALERT** | **1** | **2** | **3** | **4** | **5** |
| **ASHAMED** | **1** | **2** | **3** | **4** | **5** |
| **INSPIRED** | **1** | **2** | **3** | **4** | **5** |
| **NERVOUS** | **1** | **2** | **3** | **4** | **5** |
| **DETERMINED** | **1** | **2** | **3** | **4** | **5** |
| **ATTENTIVE** | **1** | **2** | **3** | **4** | **5** |
| **JITTERY** | **1** | **2** | **3** | **4** | **5** |
| **ACTIVE** | **1** | **2** | **3** | **4** | **5** |
| **AFRAID** | **1** | **2** | **3** | **4** | **5** |

**ANNEXURE 2**

**PANAS-H ( HINDI VERSION OF POSITIVE & NEGATIVE AFFECT SCHEDULE)**

इस पैमाने में कई शब्द होते हैं जो विभिन्न भावनाओं का वर्णन करते हैं। प्रत्येक आइटम को पढ़ें और फिर उस शब्द के आगे के स्थान में उपयुक्त उत्तर को चिह्नित करें।

(आप अभी ऐसा महसूस करते हैं, यानी वर्तमान समय में)

1=बिल्कुल नहीं 2=थोड़ा बहुत 3=मध्यम 4=बहुत 5=अत्यंत

| | | | | | |
|---|---|---|---|---|---|
| इच्छुक | 1 | 2 | 3 | 4 | 5 |
| व्यथित | 1 | 2 | 3 | 4 | 5 |
| उत्तेजित | 1 | 2 | 3 | 4 | 5 |
| परेशान | 1 | 2 | 3 | 4 | 5 |
| मजबूत | 1 | 2 | 3 | 4 | 5 |
| दोषी | 1 | 2 | 3 | 4 | 5 |
| डरा हुआ | 1 | 2 | 3 | 4 | 5 |
| प्रतिकूल | 1 | 2 | 3 | 4 | 5 |
| उत्साहयुक्त | 1 | 2 | 3 | 4 | 5 |
| गर्व | 1 | 2 | 3 | 4 | 5 |
| चिड़चिड़ा | 1 | 2 | 3 | 4 | 5 |
| सजाग | 1 | 2 | 3 | 4 | 5 |
| शर्मिंदा | 1 | 2 | 3 | 4 | 5 |
| प्रेरित | 1 | 2 | 3 | 4 | 5 |
| बेचैन | 1 | 2 | 3 | 4 | 5 |
| निर्धारित | 1 | 2 | 3 | 4 | 5 |
| सचेत | 1 | 2 | 3 | 4 | 5 |
| विक्षुब्ध | 1 | 2 | 3 | 4 | 5 |
| सक्रिय | 1 | 2 | 3 | 4 | 5 |
| भयभीत | 1 | 2 | 3 | 4 | 5 |

**ANNEXURE 3**

**FEEDBACK FORM**

1) How satisfied are you feeling after your overall blood donation experience?( Mark the honest opinion you feel):

☐ Very satisfied

☐ Somewhat satisfied

☐ Neither satisfied nor dissatisfied

☐ Somewhat dissatisfied

☐ Strongly dissatisfied

2)Can you please mark the grading of satisfaction based on your feelings during the blood donation process?

Very satisfied = 1

Somewhat satisfied=2

Neither satisfied nor dissatisfied=3

Somewhat dissatisfied =4

Strongly dissatisfied=5

| | | | | | |
|---|---|---|---|---|---|
| a)Environment of blood donation | 1 | 2 | 3 | 4 | 5 |
| b)Personal comfort | 1 | 2 | 3 | 4 | 5 |
| c)Information provided | 1 | 2 | 3 | 4 | 5 |

3. Would you like to return for blood donation?( Mark the honest opinion you feel):

- ☐ Strongly Agree
- ☐ Somewhat Agree
- ☐ Neither Agree Nor Disagree
- ☐ Somewhat Disagree
- ☐ Strongly Disagree

Thank you for your valuable feedback.

**ANNEXURE 4**

प्रतिक्रिया फॉर्म

1)आप अपने समग्र रक्तदान अनुभव के बाद कितना संतुष्ट महसूस कर रहे हैं?

- ☐ बहुत संतुष्ट
- ☐ कुछ हद तक संतुष्ट
- ☐ न तो संतुष्ट और न ही असंतुष्ट
- ☐ कुछ हद तक असंतुष्ट
- ☐ दृढ़ता से असंतुष्ट

2)क्या आप कृपया रक्तदान प्रक्रिया के दौरान अपनी भावनाओं के आधार पर संतुष्टि की श्रेणी अंकित कर सकते हैं?

बहुतसंतुष्ट =1
कुछ हद तक संतुष्ट=2
न तो संतुष्ट और न ही असंतुष्ट=3
कुछ हद तक असंतुष्ट =4
दृढ़ता से असंतुष्ट=5

| | | | | | |
|---|---|---|---|---|---|
| रक्तदान का वातावरण | 1 | 2 | 3 | 4 | 5 |
| व्यक्तिगत आराम | 1 | 2 | 3 | 4 | 5 |
| प्रदान की गई जानकारी | 1 | 2 | 3 | 4 | 5 |

3)क्या आप रक्तदान के लिए वापस लौटना चाहेंगे?

- ☐ दृढ़तापूर्वक सहमत
- ☐ थोड़ा सहमत
- ☐ न तो इस बात से सहमत है और न ही असहमत
- ☐ कुछ हद तक असहमत
- ☐ दृढ़तापूर्वक असहमत

आपके बहुमूल्य फीडबैक के लिए शुक्रिया।

## Annexure 5

**Study Title: Study of emotional profile of first time whole blood donors and the impact of emotional trajectories over feedback for donor return.**

Principal Investigator: Dr. Rut Naik

**PARTICIPANT INFORMATION SHEET (PIS)**

You are invited to participate in the study conducted at the blood center of All India Institute of Medical Science, Bhopal. We are conducting a study on the analysis of the emotional profile of whole blood donors and the impact of the emotional experience of whole blood donors regarding donor retention.

Before you make decisions about participation in the study and give consent, please read the details about the study in the following paragraphs:

Title: Study of emotional profile of first time whole blood donors and the impact of trajectories of emotional experience over donor return

Purpose of the Study: Identifying emotions of whole blood donors that arise throughout the donation process and understanding their correlation with future retention of donors and to make better strategies for overall better donor experience in future.

Methodology: The participants would be provided PANAS Questionnaire (Positive And Negative Affect schedule) at the three sites of blood center of AIIMS Bhopal. The first time in the donor waiting area, second time in the donation couch just before needle insertion and the third time in the refreshment area after the donation process is being completed. Before the participant leaves the donation area, he/she would be asked to fill up the feedback form about the experience during donation, willingness to return.

Eligibility to participate in the study: First time voluntary or replacement donors who fulfil the criteria for whole blood donation as per the guidelines of Govt. of India.

Confidentiality: All the records will be confidential, and the participant's identity would be known to the chief investigator and would not be released to anyone else.

Available information sources: The study is approved by the Ethical review board AIIMS Bhopal. No payment to participate and no compensation in case of donation related events shall be provided. For more information, or if you find it difficult to understand any of the above, you are free to contact us at Mo: 9429073996- Dr. Rut Naik

**Annexure:6**

## पहेली बार के पूरे रक्त दाताओं के भावनात्मक प्रोफाइल का अध्ययन और दाता वापसी पर भावनात्मक अनुभव के प्रक्षेपवक्र का प्रभाव

प्रधान अन्वेषक:डॉ। ऋत नायक

आंशिक सूचना पत्रक (पीआईएस)

आप अखिल भारतीय आयुर्विज्ञान संस्थान, भोपाल के रक्त केंद्र में आयोजित अध्ययन में भाग लेने के लिए आमंत्रित हैं।हम संपूर्ण रक्त दाताओं के भावनात्मक प्रोफाइल के विश्लेषण और दाता प्रतिधारण के संबंध में संपूर्ण रक्त दाताओं के भावनात्मक अनुभव के प्रभाव पर एक अध्ययन कर रहे हैं।
अध्ययन में भाग लेने और सहमति देने के बारे में निर्णय लेने से पहले, कृपया निम्नलिखित अनुच्छेद में अध्ययन के बारे में विवरण पढ़ें:

शीर्षक : **"पहेली बार के पूरे रक्त दाताओं के भावनात्मक प्रोफाइल का अध्ययन और दाता वापसी पर भावनात्मक अनुभव के प्रक्षेपवक्र का प्रभाव"**

अध्ययन का उद्देश्य : संपूर्ण रक्त दाताओं की भावनाओं की पहचान करना जो दान प्रक्रिया के दौरान उत्पन्न होती हैं और दाताओं के भविष्य के प्रतिधारण के साथ उनके संबंध को समझना और भविष्य में समग्र बेहतर दाता अनुभव के लिए बेहतर रणनीति बनाना।

कार्यप्रणाली : प्रतिभागियों को एम्स भोपाल के रक्त केंद्र के तीन स्थलों पर पैनास प्रश्नावली (सकारात्मक और नकारात्मक प्रभाव अनुसूची) प्रदान की जाएगी। पहली बार डोनर वेटिंग एरिया में, दूसरी बार सुई डालने से ठीक पहले डोनेशन काउच में और तीसरी बार रिफ्रेशमेंट क्षेत्रमें,दान प्रक्रिया पूरी होने के बाद । इससे पहले कि प्रतिभागी दान क्षेत्र छोड़ दें, उनसे  दान के दौरान अनुभव, वापस आने की इच्छा के बारे में फीडबैक फॉर्म भरने के लिए कहा जाएगा।

अध्ययन में भाग लेने की पात्रता:

पहली बार स्वैच्छिक या प्रतिस्थापन दाता जो भारत सरकार के दिशानिर्देशों के अनुसार संपूर्ण रक्तदान के मानदंडों को पूरा करते हैं।
गोपनीयता : सभी रिकॉर्ड गोपनीय होंगे और रोगी की पहचान मुख्य जांचकर्ता को पता होगी और किसी अन्य को जारी नहीं की जाएगी।

उपलब्ध सूचना स्रोत : अध्ययन को एथिकल रिव्यू बोर्ड एम्स भोपाल द्वारा अनुमोदित किया गया है। भाग लेने के लिए कोई भुगतान नहीं और दान संबंधी घटनाओं के मामले में कोई मुआवजा प्रदान नहीं किया जाएगा। अधिक जानकारी के लिए, या यदि आपको उपरोक्त में से किसी को समझने में कठिनाई होती है, तो आप हमसे डॉ। ऋत नायक -मो। ९४२९०७३९९६ पर संपर्क करने के लिए स्वतंत्र हैं।

**ANNEXURE:7**
**PARTICIPANT INFORMED CONSENT FORM**

Participant identification number for this study:_____
Title of project: Study of emotional profile of first time whole blood donors and the impact of trajectories of emotional experience over donor return.

Name of Investigator: Dr.Rut Naik
Contact no.:9429073996

Number of visits for participation: One-time

The contents of the information sheet dated _____ _, have been read carefully by me / explained to me in detail, in a language that I comprehend, and I have fully understood the contents. I confirm that I have had the opportunity to ask questions and my questions have been satisfactorily answered.

The nature and purpose of the study and its potential risks / benefits and expected duration of the study, and other relevant details of the study have been explained to me in detail. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

I understand that the information collected about me from my participation in this research and sections of any of my medical notes may be looked at by responsible individuals at AIIMS Bhopal. I give permission to these individuals to have access to my records.

I agree to participate in the study.

Date:
Place:
Signature of participant: _____

Name of the participant:

Son / Daughter / Spouse of :

Complete Postal Address:

This is to certify that the above consent has been obtained in my presence.

Signature of the Investigator_____

Date:

Place:

Witness

Signature & Name:

**ANNEXURE:8**

**सहभागी सूचित सहमचत प्रपत्र**

**इस ज ांच के लिये सहभ गी पहच न क्रम ांक: _____**

**अनुसंधान शीर्षक:पहेली बार के पूरे रक्त दाताओं के भावनात्मक प्रोफाइल का अध्ययन और दाता वापसी पर भावनात्मक अनुभव के प्रक्षेपवक्र का प्रभाव**

प्रधान अन्वेषक:डॉ। ऋत नायक

**फोन नांबर:** 9429073996

भागीदारी के लिए विज़िट की संख्या: एक बार

दिनांक _____ की सूचना पत्र की सामग्री को मेरे द्वारा ध्यान से पढ़ा गया है / मुझे विस्तार से समझाया गया है, जिस भाषा में मैं समझता हूं, और मैंने सामग्री को पूरी तरह से समझ लिया है। मैं पुष्टि करता हूं कि मुझे प्रश्न पूछने का अवसर मिला है और मेरे प्रश्नों का संतोषजनक उत्तर दिया गया है।

अध्ययन की प्रकृति और उद्देश्य और इसके संभावित जोखिम / लाभ और अध्ययन की अपेक्षित अवधि, और अध्ययन के अन्य प्रासंगिक विवरण मुझे विस्तार से बताए गए हैं। मैं समझता हूं कि मेरी भागीदारी स्वैच्छिक है और मैं बिना कोई कारण बताए, मेरी चिकित्सा देखभाल या कानूनी अधिकारों को प्रभावित किए बिना किसी भी समय वापस लेने के लिए स्वतंत्र हूं।

मैं समझता हूं कि इस शोध में मेरी भागीदारी से मेरे बारे में एकत्र की गई जानकारी और मेरे किसी भी मेडिकल नोट के अनुभागों को एम्स भोपाल में जिम्मेदार व्यक्तियों द्वारा देखा जा सकता है। मैं इन व्यक्तियों को अपने रिकॉर्ड तक पहुंच की अनुमति देता हूं।

मैं उपरोक्त अध्ययन में भाग लेने के लिए सहमत हूं

प्रतिभागी का नाम:

पुत्र/पुत्री/पति/पत्नी :

डाक का पूरा पता:

जगह:

दिनांक:

प्रतिभागी के हस्ताक्षर: _____

यह प्रमाणित किया जाता है कि उपरोक्त सहमति मेरी उपस्थिति में प्राप्त की गई है।

प्रधान अन्वेषक के हस्ताक्षर:_____

दिनांक:

जगह:

गवाह:

हस्ताक्षर और नाम:

| Why To Above Question | Satisfaction: Environment Of Blood Donation | Satisfaction: Personal Comfort | Satisfaction: Informan Provided | Age (Years) | Age | Gender | Address | Education | Occupation | Marital Status | Interested (T1) | Distressed (T1) | Excited (T1) | Upset (T1) | Strong (T1) | Guilty (T1) | Scared (T1) | Hostile (T1) | Enthusiastic (T1) | Proud (T1) | Irritable (T1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Informative About Health | 1 | 1 | 1 | 21 | 18-30 Years | Female | Urban | Higher Secondary | Student | Unmarried | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 2 | 5 | 5 | 1 |
| Helps People | 1 | 1 | 1 | 28 | 18-30 Years | Male | Urban | Graduation | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Helps People | 1 | 1 | 1 | 32 | 31-40 Years | Male | Non Urban | Graduation | Student | Unmarried | 4 | 2 | 3 | 2 | 4 | 1 | 2 | 4 | 2 | 3 | 1 |
| Serve People | 1 | 2 | 1 | 21 | 18-30 Years | Female | Non Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Altruism | 1 | 1 | 1 | 19 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Fear Removed | 2 | 1 | 1 | 23 | 18-30 Years | Male | Urban | Post Graduation | Service | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 1 | 24 | 18-30 Years | Female | Non Urban | Graduation | Service | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Noble Act | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 1 | 5 | 1 | 5 | 1 | 3 | 1 | 4 | 5 | 1 |
| Family Members | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Unemployed | Unmarried | 5 | 3 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 2 | 1 | 35 | 31-40 Years | Male | Urban | Post Graduation | Service | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 2 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 25 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 32 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 2 | 2 | 5 | 1 |
| Life Saving | 2 | 1 | 1 | 34 | 31-40 Years | Male | Urban | Primary | Job | Married | 5 | 1 | 5 | 5 | 1 | 1 | 1 | 4 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 19 | 18-30 Years | Male | Non Urban | Higher Secondary | Student | Unmarried | 4 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 4 | 4 | 1 |
| Life Saving | 1 | 2 | 1 | 28 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 4 | 1 | 2 | 1 | 5 | 1 | 1 | 1 | 3 | 3 | 1 |
| Life Saving | 3 | 1 | 1 | 19 | 18-30 Years | Male | Urban | Secondary | Job | Unmarried | 1 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 4 | 1 |
| Family Members | 1 | 1 | 1 | 23 | 18-30 Years | Male | Urban | Primary | Job | Married | 5 | 4 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 4 | 1 |

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| Helps People | 2 | 3 | 1 | 20 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 4 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 3 | 4 | 1 |
| Life Saving | 1 | 1 | 1 | 29 | 18-30 Years | Male | Urban | Secondary | Job | Married | 4 | 5 | 4 | 3 | 2 | 1 | 5 | 5 | 3 | 5 | 2 |
| Health Benefit | 1 | 1 | 1 | 26 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 4 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 39 | 31-40 Years | Male | Non Urban | Secondary | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 18 | 18-30 Years | Female | Urban | Higher Secondary | Student | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Altruism | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Service | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 18 | 18-30 Years | Male | Non Urban | Secondary | Job | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Helps People | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 2 | 4 | 1 | 5 | 1 | 3 | 2 | 5 | 5 | 2 |
| Life Saving | 1 | 2 | 1 | 35 | 31-40 Years | Male | Non Urban | Post Graduation | Service | Married | 5 | 1 | 4 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 2 |
| To Get Blood When In Need | 2 | 3 | 2 | 37 | 31-40 Years | Male | Urban | Primary | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |

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| Life Saving | 1 | 1 | 1 | 28 | 18-30 Years | Male | Non Urban | Primary | Job | Married | 3 | 1 | 3 | 1 | 4 | 1 | 2 | 3 | 3 | 4 | 1 |
| Health Benefit | 1 | 2 | 2 | 35 | 31-40 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 3 | 1 | 5 | 4 | 2 |
| Life Saving | 1 | 2 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 2 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 3 | 1 | 25 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Life Saving | 1 | 1 | 1 | 27 | 18-30 Years | Male | Urban | Graduation | Job | Married | 4 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 4 | 4 | 1 |
| Life Saving | 1 | 2 | 1 | 25 | 18-30 Years | Male | Urban | Secondary | Job | Married | 5 | 2 | 4 | 1 | 4 | 1 | 2 | 2 | 4 | 5 | 2 |
| Life Saving | 1 | 2 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Unmarried | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 1 | 4 | 3 | 1 |
| Helps People | 2 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Fear Removed | 1 | 1 | 1 | 31 | 31-40 Years | Female | Urban | Higher Secondary | Homemaker | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| My Friend Donates | 2 | 1 | 1 | 27 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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| Social Identity (Want To Give People Example) | 2 | 2 | 2 | 39 | 31-40 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 2 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 2 | 2 | 22 | 18-30 Years | Male | Urban | Graduation | Job | Unmarried | 3 | 1 | 3 | 1 | 4 | 1 | 2 | 3 | 3 | 4 | 1 |
| Self Happiness | 1 | 1 | 2 | 21 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 2 | 1 | 24 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 4 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 34 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Social Identity (Want To Give People Example) | 1 | 2 | 1 | 38 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 5 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 26 | 18-30 Years | Male | Non Urban | Primary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Can Cause Weakness | 1 | 1 | 1 | 29 | 18-30 Years | Male | Urban | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 24 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 1 | 5 | 1 | 4 | 1 | 2 | 1 | 5 | 5 | 1 |

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| Serve People | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 2 | 1 | 21 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 1 | 3 | 2 | 5 | 1 | 1 | 2 | 3 | 4 | 2 |
| Self Happiness | 2 | 2 | 1 | 27 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 2 | 5 | 5 | 1 |
| Fear Removed | 2 | 2 | 1 | 49 | 41-50 Years | Male | Non Urban | Primary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 4 | 5 | 1 |
| Health Benefit | 1 | 2 | 1 | 35 | 31-40 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Helps People | 1 | 2 | 1 | 30 | 18-30 Years | Male | Urban | Graduation | Service | Married | 5 | 1 | 4 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 2 | 1 | 30 | 18-30 Years | Male | Urban | Graduation | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |
| Serve People | 1 | 1 | 2 | 32 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 3 | 2 | 3 | 1 | 3 | 1 | 2 | 3 | 4 | 4 | 1 |
| Helps People | 2 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 2 | 43 | 41-50 Years | Male | Urban | Secondary | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |
| Blood Can Not Be | 1 | 1 | 1 | 19 | 18-30 | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 2 |

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| Synthesized (Demand Supply Understanddi ng) | | | | | Year s | | | | | | | | | | | | | | | | | |
| Helps People | 2 | 1 | 2 | 39 | 31-40 Year s | Male | Urba n | Higher Secondar y | | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Helps People | 1 | 1 | 1 | 33 | 31-40 Year s | Male | Urba n | Higher Secondar y | | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Health Benefit | 2 | 1 | 2 | 28 | 18-30 Year s | Male | Urba n | Graduati on | | Job | Married | 4 | 2 | 3 | 2 | 4 | 1 | 2 | 4 | 2 | 3 | 1 |
| Better Donor Health | 1 | 1 | 1 | 23 | 18-30 Year s | Male | Non Urba n | Primary | | Job | Married | 5 | 1 | 3 | 2 | 4 | 2 | 2 | 1 | 4 | 4 | 2 |
| Self Happiness | 2 | 1 | 1 | 32 | 31-40 Year s | Male | Non Urba n | Higher Secondar y | | Job | Married | 5 | 1 | 4 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 42 | 41-50 Year s | Male | Urba n | Secondar y | | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 31 | 31-40 Year s | Male | Urba n | Graduati on | | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 28 | 18-30 Year s | Male | Urba n | Graduati on | | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 2 | 2 | 1 | 28 | 18-30 Year s | Male | Urba n | Graduati on | | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 3 | 1 | 5 | 4 | 2 |

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| Save Life | 1 | 1 | 1 | 34 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 1 | 4 | 1 | 4 | 2 | 2 | 1 | 4 | 4 | 1 |
| Save Life | 2 | 1 | 2 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 1 | 2 | 1 | 5 | 1 | 1 | 1 | 3 | 3 | 1 |
| Serve People | 2 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 2 | 3 | 2 | 4 | 1 | 2 | 4 | 2 | 3 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 23 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 40 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 4 | 4 | 1 |
| Save Life | 1 | 2 | 1 | 29 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 4 | 1 | 3 | 2 | 5 | 1 | 1 | 2 | 3 | 4 | 2 |
| Better Donor Health | 1 | 1 | 1 | 23 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 2 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Save Life | 2 | 1 | 2 | 24 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 2 | 1 | 1 | 42 | 41-50 Years | Male | Urban | Post Graduation | Service | Married | 4 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 2 | 37 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Serve People | 1 | 1 | 1 | 32 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 3 | 5 | 3 | 2 | 1 | 5 | 3 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 24 | 18-30 Years | Male | Urban | Secondary | Job | Married | 5 | 1 | 4 | 1 | 3 | 1 | 2 | 1 | 4 | 4 | 1 |
| Save Life | 1 | 1 | 1 | 23 | 18-30 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 2 | 1 | 1 | 23 | 18-30 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 5 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 2 |
| Save Life | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 3 | 5 | 3 | 2 | 1 | 5 | 3 | 5 | 5 | 1 |
| Save Life | 1 | 2 | 1 | 25 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 1 | 23 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 2 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 2 | 1 | 32 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 32 | 31-40 Years | Male | Non Urban | Secondary | Job | Married | 5 | 2 | 3 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 2 | 1 | 27 | 18-30 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 34 | 31-40 Years | Male | Non Urban | Primary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 1 | 5 | 1 | 4 | 1 | 2 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 2 | 4 | 1 | 4 | 1 | 2 | 2 | 4 | 5 | 2 |
| Better Donor Health | 1 | 1 | 1 | 25 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 4 | 5 | 4 | 3 | 2 | 1 | 5 | 5 | 3 | 5 | 2 |
| Serve People | 2 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 3 | 1 | 4 | 1 | 2 | 2 | 4 | 4 | 1 |
| Save Life | 2 | 1 | 1 | 20 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 4 | 1 | 4 | 1 | 4 | 2 | 2 | 1 | 4 | 4 | 1 |
| Serve People | 1 | 2 | 1 | 19 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 4 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 24 | 18-30 Years | Male | Urban | Secondary | Job | Married | 4 | 2 | 4 | 2 | 4 | 1 | 2 | 1 | 4 | 5 | 1 |
| Save Life | 1 | 1 | 2 | 28 | 18-30 Years | Female | Non Urban | Secondary | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 2 |

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| Serve People | 1 | 1 | 2 | 32 | 31-40 Years | Male | Urban | Post Graduation | Service | Married | 3 | 2 | 3 | 1 | 3 | 1 | 2 | 3 | 4 | 4 | 1 |
| Self Happiness | 1 | 2 | 1 | 25 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Self Happiness | 2 | 1 | 2 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 1 | 3 | 1 | 5 | 2 | 1 | 1 | 5 | 5 | 1 |
| Social Identity (Want To Give People Example) | 1 | 1 | 1 | 22 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 3 | 2 | 4 | 2 | 2 | 1 | 4 | 4 | 2 |
| Better Donor Health | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 41 | 41-50 Years | Male | Non Urban | Secondary | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 2 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 1 | 3 | 1 | 5 | 2 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 2 | 1 | 24 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 2 | 5 | 3 | 5 | 1 | 4 | 2 | 3 | 5 | 1 |
| Self Happiness | 1 | 2 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | 4 | 4 | 1 |
| Save Life | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 2 | 4 | 1 | 4 | 1 | 2 | 2 | 4 | 5 | 2 |

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| Donation Can Make Me Weak | 1 | 2 | 1 | 21 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 5 | 4 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 2 | 1 | 23 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 2 | 31 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 3 | 1 | 3 | 1 | 4 | 1 | 2 | 3 | 3 | 4 | 1 |
| Serve People | 1 | 1 | 1 | 26 | 18-30 Years | Male | Non Urban | Graduation | Job | Married | 5 | 2 | 3 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 2 | 1 | 1 | 20 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 4 | 2 | 3 | 2 | 4 | 1 | 2 | 4 | 2 | 3 | 1 |
| Self Happiness | 2 | 1 | 1 | 23 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 27 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 2 | 5 | 5 | 1 |
| To Get Blood When In Need | 2 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 1 |
| Serve People | 2 | 1 | 1 | 30 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 5 | 1 | 1 | 1 | 4 | 5 | 5 | 1 |
| To Get Blood When In Need | 3 | 1 | 1 | 19 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 4 | 4 | 1 |

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| Self Happiness | 2 | 2 | 1 | 40 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 2 | 1 | 1 | 26 | 18-30 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 2 | 1 | 26 | 18-30 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 4 | 1 |
| Save Life | 1 | 1 | 1 | 39 | 31-40 Years | Male | Urban | Graduation | Service | Married | 5 | 1 | 5 | 5 | 1 | 1 | 1 | 4 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 20 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 4 | 5 | 4 | 3 | 2 | 1 | 5 | 5 | 3 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 28 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | 4 | 4 | 1 |
| Self Happiness | 1 | 1 | 1 | 29 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 29 | 18-30 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 3 | 1 | 5 | 4 | 2 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 38 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 4 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 2 | 26 | 18-30 Years | Male | Urban | Post Graduation | Job | Married | 4 | 2 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |

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| To Get Blood When In Need | 2 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 3 | 2 | 5 | 5 | 2 |
| Save Life | 2 | 1 | 1 | 20 | 18-30 Years | Female | Urban | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 4 | 4 | 1 |
| To Get Blood When In Need | 1 | 1 | 2 | 29 | 18-30 Years | Male | Non Urban | Graduation | Job | Married | 5 | 3 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Save Life | 2 | 1 | 1 | 28 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 3 | 2 | 5 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 30 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 3 | 1 | 4 | 1 | 2 | 2 | 4 | 4 | 1 |
| Save Life | 1 | 1 | 1 | 34 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 28 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 1 | 3 | 1 | 5 | 2 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | 4 | 4 | 1 |
| To Get Blood When In Need | 1 | 1 | 2 | 19 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 3 | 5 | 3 | 2 | 1 | 5 | 3 | 5 | 5 | 1 |
| Serve People | 2 | 1 | 1 | 32 | 31-40 Years | Female | Non Urban | Secondary | Homemaker | Married | 4 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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| Serve People | 1 | 2 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 24 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 28 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 5 | 3 | 5 | 1 | 4 | 2 | 3 | 5 | 1 |
| Social Identity (Want To Give People Example) | 1 | 1 | 1 | 22 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 4 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 4 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 28 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 2 | 1 | 5 | 1 | 1 | 1 | 3 | 3 | 1 |
| To Get Blood When In Need | 2 | 1 | 1 | 36 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 27 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 1 | 18 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 2 | 4 | 1 | 5 | 1 | 3 | 2 | 5 | 5 | 2 |
| Better Donor Health | 1 | 1 | 1 | 24 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 3 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |

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| Save Life | 1 | 1 | 1 | 34 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 3 | 24 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 3 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Serve People | 2 | 2 | 1 | 40 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 2 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Secondary | Job | Married | 5 | 4 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 35 | 31-40 Years | Male | Non Urban | Graduation | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 20 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 2 | 2 | 5 | 1 |
| Better Donor Health | 2 | 1 | 1 | 35 | 31-40 Years | Male | Non Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 4 | 2 | 2 | 1 | 4 | 4 | 1 |
| Can Cause Weakness | 2 | 1 | 1 | 23 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 4 | 4 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 43 | 41-50 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 2 | 2 | 2 | 19 | 18-30 | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 3 | 2 | 4 | 2 | 2 | 1 | 4 | 4 | 2 |

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| | | | | Years | | | | | | | | | | | | | | | | | | |
| To Get Blood When In Need | 1 | 1 | 1 | 38 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |
| Save Life | 2 | 2 | 1 | 25 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 1 | 3 | 2 | 5 | 1 | 1 | 2 | 3 | 4 | 2 |
| To Get Blood When In Need | 1 | 1 | 1 | 21 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 4 | 1 |
| To Get Blood When In Need | 1 | 2 | 1 | 21 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 1 | 4 | 3 | 1 |
| Save Life | 1 | 1 | 1 | 19 | 18-30 Years | Male | Non Urban | Higher Secondary | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 2 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 21 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 2 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 28 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 5 | 4 | 3 | 2 | 1 | 5 | 5 | 3 | 5 | 2 |
| Serve People | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 3 | 1 | 4 | 1 | 2 | 2 | 4 | 4 | 1 |

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| Save Life | 1 | 1 | 1 | 30 | 18-30 Years | Male | Non Urban | Post Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 2 | 30 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 31 | 31-40 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |
| Self Happiness | 1 | 1 | 1 | 28 | 18-30 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 4 | 1 |
| Dont Like Sight Of Blood | 1 | 1 | 2 | 27 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 4 | 4 | 1 |
| To Get Blood When In Need | 2 | 2 | 2 | 21 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 2 |
| Self Happiness | 2 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Secondary | Student | Unmarried | 5 | 4 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 4 | 1 |
| Self Happiness | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 4 | 1 | 2 | 39 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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| To Get Blood When In Need | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 3 | 4 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Secondary | Job | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Social Identity (Want To Give People Example) | 2 | 1 | 2 | 24 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 27 | 18-30 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 2 | 5 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Social Identity (Want To Give People Example) | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 2 | 5 | 3 | 5 | 1 | 4 | 2 | 3 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 24 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 3 | 4 | 1 |

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| Save Life | 1 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Secondary | Job | Unmarried | 3 | 2 | 3 | 1 | 3 | 1 | 2 | 3 | 4 | 4 | 1 |
| Serve People | 1 | 1 | 2 | 50 | 41-50 Years | Male | Non Urban | Primary | Job | Married | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 2 | 2 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 19 | 18-30 Years | Male | Non Urban | Graduation | Student | Unmarried | 5 | 2 | 3 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 2 | 34 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 4 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Secondary | Job | Unmarried | 4 | 1 | 5 | 1 | 4 | 1 | 2 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 2 | 41 | 41-50 Years | Male | Non Urban | Secondary | Job | Married | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 2 | 2 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 24 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 3 | 5 | 3 | 2 | 1 | 5 | 3 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 2 | 33 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 3 | 1 | 5 | 4 | 2 |
| Save Life | 1 | 1 | 1 | 52 | 51-60 Years | Male | Non Urban | Primary | Job | Married | 4 | 2 | 4 | 2 | 4 | 1 | 2 | 1 | 4 | 5 | 1 |
| Serve People | 1 | 1 | 2 | 30 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 2 |

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| To Get Blood When In Need | 2 | 1 | 1 | 23 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 23 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 4 | 4 | 1 |
| Better Donor Health | 1 | 1 | 1 | 38 | 31-40 Years | Male | Urban | Graduation | Job | Married | 3 | 1 | 3 | 1 | 4 | 1 | 2 | 3 | 3 | 4 | 1 |
| Serve People | 1 | 1 | 1 | 19 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Serve People | 2 | 1 | 1 | 33 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 2 | 1 | 1 | 31 | 31-40 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Better Donor Health | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 2 | 1 | 3 | 22 | 18-30 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 2 | 18 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 4 | 1 | 5 | 1 | 5 | 1 | 3 | 1 | 4 | 5 | 1 |

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| To Get Blood When In Need | 1 | 1 | 1 | 31 | 31-40 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 2 |
| Save Life | 1 | 1 | 1 | 24 | 18-30 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 2 | 1 | 3 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 32 | 31-40 Years | Male | Non Urban | Graduation | Job | Married | 4 | 1 | 5 | 1 | 5 | 1 | 3 | 1 | 4 | 5 | 1 |
| Self Happiness | 2 | 1 | 1 | 19 | 18-30 Years | Male | Non Urban | Higher Secondary | Student | Unmarried | 4 | 1 | 5 | 1 | 5 | 1 | 3 | 1 | 4 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 28 | 18-30 Years | Male | Non Urban | Higher Secondary | Service | Married | 5 | 2 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 2 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 34 | 31-40 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |
| Self Happiness | 1 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Secondary | Job | Married | 5 | 4 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 4 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 3 | 1 | 2 | 1 | 4 | 4 | 1 |

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| Serve People | 1 | 1 | 1 | 33 | 31-40 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 2 | 4 | 2 | 4 | 1 | 2 | 1 | 4 | 5 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 60 | 51-60 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 3 | 4 | 1 |
| Serve People | 1 | 1 | 1 | 37 | 31-40 Years | Male | Non Urban | Secondary | Job | Married | 5 | 1 | 5 | 5 | 1 | 1 | 1 | 4 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 2 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |
| Self Happiness | 1 | 1 | 1 | 18 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 5 | 2 | 4 | 1 | 4 | 1 | 2 | 2 | 4 | 5 | 2 |
| Serve People | 2 | 1 | 1 | 38 | 31-40 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 2 | 2 | 1 | 26 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | 4 | 4 | 1 |
| Serve People | 2 | 1 | 1 | 25 | 18-30 Years | Male | Non Urban | Higher Secondary | Job | Married | 4 | 1 | 2 | 1 | 5 | 1 | 1 | 1 | 3 | 3 | 1 |
| To Get Blood When In Need | 1 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Graduation | Job | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 2 | 1 | 25 | 18-30 Years | Female | Non Urban | Graduation | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 34 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 4 | 1 | 5 | 1 | 4 | 1 | 2 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 28 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 31 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 3 | 1 | 2 | 1 | 4 | 4 | 1 |
| Save Life | 1 | 1 | 1 | 27 | 18-30 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 2 | 1 | 41 | 41-50 Years | Male | Non Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 21 | 18-30 Years | Male | Urban | Graduation | Job | Unmarried | 5 | 2 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 2 |
| Self Happiness | 1 | 2 | 1 | 23 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 1 | 4 | 3 | 1 |
| Fear Of Getting Sick | 1 | 2 | 2 | 20 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 4 | 2 | 4 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 2 |
| New Blood Formation | 1 | 1 | 1 | 35 | 31-40 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Lack Of Knowledge | 1 | 1 | 1 | 31 | 31-40 Years | Male | Rural | Secondary | Job | Married | 5 | 2 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 2 |

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| Can Not Express | 2 | 2 | 2 | 19 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 1 |
| Feeling Good | 1 | 1 | 1 | 26 | 18-30 Years | Female | Urban | Graduation | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Timing For Donation Is Limited | 1 | 1 | 1 | 30 | 18-30 Years | Male | Urban | Post Graduation | Service | Married | 4 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 4 | 5 | 1 |
| No Personal Loss In Donating Blood | 1 | 1 | 1 | 29 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Not Interested In Blood Donation | 1 | 2 | 2 | 23 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 5 | 2 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 1 |
| Moral Elevation | 1 | 1 | 1 | 23 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 4 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Feeling Good | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Good For Health | 2 | 2 | 2 | 39 | 31-40 Years | Male | Rural | Secondary | Job | Married | 5 | 2 | 3 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Feeling Good | 2 | 1 | 2 | 36 | 31-40 Years | Male | Rural | Secondary | Job | Married | 5 | 1 | 3 | 1 | 4 | 1 | 2 | 2 | 4 | 4 | 1 |
| Health Benefit | 1 | 1 | 1 | 29 | 18-30 Years | Male | Urban | Post Graduation | Job | Married | 4 | 2 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |

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| Only If I Don'T Get Health Problems This Time | 1 | 1 | 2 | 23 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Feeling Good | 1 | 2 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 1 | 3 | 1 | 5 | 2 | 1 | 1 | 5 | 5 | 1 |
| Feeling Good | 2 | 1 | 2 | 23 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 4 | 5 | 1 |
| Social Identity (Want To Give People Example) | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Service | Unmarried | 3 | 2 | 3 | 1 | 3 | 1 | 2 | 3 | 4 | 4 | 1 |
| Feeling Good | 1 | 1 | 2 | 40 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 4 | 1 |
| Moral Elevation | 1 | 1 | 1 | 44 | 41-50 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 5 | 3 | 5 | 1 | 4 | 2 | 3 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 30 | 18-30 Years | Male | Rural | Graduation | Service | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Social Identity (Want To Give People Example) | 1 | 1 | 1 | 23 | 18-30 Years | Male | Urban | Post Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 3 | 1 | 2 | 1 | 4 | 4 | 1 |
| Good For Health | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 3 | 34 | 31-40 Years | Male | Rural | Higher Secondary | Job | Married | 3 | 1 | 3 | 1 | 4 | 1 | 2 | 3 | 3 | 4 | 1 |

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| Save Life | 1 | 1 | 1 | 30 | 18-30 Years | Male | Rural | Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Moral Elevation | 1 | 1 | 2 | 23 | 18-30 Years | Male | Rural | Primary | Job | Married | 4 | 2 | 4 | 2 | 4 | 1 | 2 | 1 | 4 | 5 | 1 |
| No Personal Loss In Donating Blood | 2 | 1 | 1 | 37 | 31-40 Years | Male | Urban | Secondary | Job | Married | 5 | 2 | 4 | 1 | 4 | 1 | 2 | 2 | 4 | 5 | 2 |
| Good For Health | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Post Graduation | Job | Unmarried | 5 | 3 | 5 | 3 | 2 | 1 | 5 | 3 | 5 | 5 | 1 |
| No Personal Loss In Donating Blood | 1 | 1 | 2 | 28 | 18-30 Years | Male | Rural | Primary | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 3 | 1 | 5 | 4 | 2 |
| Save Life | 1 | 1 | 1 | 44 | 41-50 Years | Male | Urban | Graduation | Job | Married | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 1 | 4 | 3 | 1 |
| Helps People In Need | 1 | 1 | 1 | 38 | 31-40 Years | Female | Rural | Secondary | Unemployed (House Wife) | Married | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | 4 | 4 | 1 |
| Feeling Good | 2 | 2 | 2 | 22 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 4 | 1 | 5 | 1 | 4 | 1 | 2 | 1 | 5 | 5 | 1 |
| Can Not Express | 1 | 2 | 2 | 30 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |

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| Not Interested In Blood Donation | 2 | 2 | 3 | 49 | 41-50 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Helps People In Need | 1 | 1 | 2 | 50 | 41-50 Years | Male | Rural | Primary | Job | Married | 4 | 1 | 4 | 1 | 4 | 2 | 2 | 1 | 4 | 4 | 1 |
| Nil | 1 | 2 | 2 | 48 | 41-50 Years | Male | Rural | Graduation | Service | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |
| Save Life | 1 | 1 | 1 | 41 | 41-50 Years | Male | Urban | Secondary | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 4 | 4 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng | 1 | 1 | 2 | 24 | 18-30 Years | Male | Rural | Higher Secondary | Job | Unmarried | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |
| Helps People In Need | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Unmarried | 4 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 2 | 2 | 45 | 41-50 Years | Male | Rural | Secondary | Job | Married | 4 | 1 | 3 | 2 | 5 | 1 | 1 | 2 | 3 | 4 | 2 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 24 | 18-30 Years | Male | Urban | Higher Secondary | Job | Unmarried | 5 | 1 | 5 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 2 |
| Save Life | 2 | 1 | 1 | 29 | 18-30 Years | Male | Rural | Graduation | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 2 | 2 | 2 | 22 | 18-30 Years | Male | Urban | Graduation | Job | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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| Lack Of Knowledge | 1 | 2 | 2 | 36 | 31-40 Years | Male | Rural | Post Graduation | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 2 | 1 | 23 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 2 | 3 | 2 | 4 | 1 | 2 | 4 | 2 | 3 | 1 |
| Self Happiness | 1 | 1 | 1 | 37 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 44 | 41-50 Years | Male | Urban | Post Graduation | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 25 | 18-30 Years | Male | Rural | Secondary | Job | Married | 4 | 1 | 5 | 1 | 4 | 1 | 2 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 2 | 28 | 18-30 Years | Male | Rural | Primary | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 2 |
| Save Life | 1 | 2 | 1 | 26 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 2 | 1 | 1 | 28 | 18-30 Years | Male | Rural | Higher Secondary | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 4 | 5 | 1 |
| Serve People | 1 | 2 | 1 | 27 | 18-30 Years | Female | Rural | Higher Secondary | Job | Married | 5 | 4 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 4 | 1 |
| Serve People | 2 | 1 | 3 | 23 | 18-30 | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 2 |

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| | | | | | Years | | | | | | | | | | | | | | | | | |
| Serve People | 1 | 1 | 1 | 29 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Not Interested In Blood Donation | 1 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Unmarried | 5 | 2 | 4 | 1 | 5 | 1 | 3 | 2 | 5 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 24 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 2 | 5 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng) | 1 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Graduation | Job | Unmarried | 5 | 2 | 4 | 1 | 4 | 1 | 2 | 2 | 4 | 5 | 2 |
| Social Identity (Want To Give People Example) | 1 | 1 | 1 | 32 | 31-40 Years | Male | Rural | Graduation | Service | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |
| Because My Friend Donated Here | 1 | 1 | 1 | 20 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 4 | 1 | 3 | 2 | 5 | 1 | 1 | 2 | 3 | 4 | 2 |
| Informative About Health | 1 | 1 | 1 | 32 | 31-40 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Donation Can Make Me Weak | 1 | 1 | 1 | 18 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 4 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Informative About Health | 1 | 1 | 1 | 29 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |

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| Fear Of Getting Sick | 1 | 1 | 3 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 3 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 25 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 5 | 5 | 1 | 1 | 1 | 4 | 5 | 5 | 1 |
| Fear Of Getting Sick | 2 | 1 | 1 | 20 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Because My Friend Donated Here | 1 | 1 | 1 | 29 | 18-30 Years | Male | Urban | Graduation | Service | Married | 5 | 1 | 3 | 1 | 4 | 1 | 2 | 2 | 4 | 4 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng | 1 | 1 | 2 | 32 | 31-40 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 2 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 27 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 2 | 1 | 1 | 29 | 18-30 Years | Male | Rural | Secondary | Job | Married | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 1 | 4 | 3 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng | 1 | 1 | 1 | 22 | 18-30 Years | Male | Rural | Secondary | Job | Unmarried | 5 | 2 | 3 | 2 | 3 | 1 | 2 | 2 | 4 | 4 | 1 |
| Self Happiness | 2 | 2 | 1 | 24 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 1 | 3 | 1 | 5 | 2 | 1 | 1 | 5 | 5 | 1 |

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| Serve People | 1 | 2 | 1 | 23 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 4 | 1 | 3 | 2 | 5 | 1 | 1 | 2 | 3 | 4 | 2 |
| Self Happiness | 1 | 1 | 1 | 38 | 31-40 Years | Male | Rural | Graduation | Service | Married | 4 | 1 | 2 | 1 | 5 | 1 | 1 | 1 | 3 | 3 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 27 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 2 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 18 | 18-30 Years | Male | Rural | Higher Secondary | Student | Unmarried | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 4 | 4 | 1 |
| Self Happiness | 1 | 2 | 1 | 24 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |
| Social Identity (Want To Give People Example) | 1 | 1 | 1 | 33 | 31-40 Years | Male | Urban | Graduation | Service | Married | 5 | 2 | 5 | 3 | 5 | 1 | 4 | 2 | 3 | 5 | 1 |
| Because My Friend Donated Here | 2 | 2 | 2 | 24 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 3 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Serve People | 2 | 2 | 1 | 24 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 2 | 31 | 31-40 Years | Male | Urban | Post Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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| Self Happiness | 2 | 1 | 1 | 23 | 18-30 Years | Male | Rural | Secondary | Job | Married | 5 | 1 | 4 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng | 1 | 1 | 1 | 24 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 2 | 1 | 1 | 19 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 5 | 1 | 4 | 1 | 3 | 1 | 2 | 1 | 4 | 4 | 1 |
| Serve People | 2 | 1 | 1 | 22 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 3 | 5 | 3 | 2 | 1 | 5 | 3 | 5 | 5 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 2 | 25 | 18-30 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 4 | 1 | 4 | 1 | 2 | 1 | 4 | 4 | 1 |
| Serve People | 1 | 1 | 1 | 25 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 3 | 2 | 3 | 1 | 3 | 1 | 2 | 3 | 4 | 4 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 46 | 41-50 Years | Male | Rural | Secondary | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 2 | 25 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 35 | 31-40 | Male | Urban | Post Graduation | Job | Married | 5 | 3 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |

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| | | | | | Years | | | | | | | | | | | | | | | | | |
| Serve People | 1 | 1 | 1 | 18 | 18-30 Years | Male | Urban | Higher Secondary | Student | Unmarried | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 2 | 2 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 37 | 31-40 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 28 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 3 | 2 | 4 | 2 | 2 | 1 | 4 | 4 | 2 |
| Self Happiness | 1 | 1 | 1 | 32 | 31-40 Years | Male | Urban | Graduation | Service | Married | 4 | 5 | 4 | 3 | 2 | 1 | 5 | 5 | 3 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 35 | 31-40 Years | Male | Rural | Graduation | Job | Married | 4 | 2 | 4 | 2 | 4 | 1 | 2 | 1 | 4 | 5 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 18 | 18-30 Years | Male | Rural | Higher Secondary | Student | Unmarried | 4 | 1 | 5 | 1 | 4 | 1 | 2 | 1 | 5 | 5 | 1 |
| Self Happiness | 2 | 1 | 1 | 20 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 4 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 4 | 4 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 21 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 5 | 2 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 3 | 1 | 3 | 1 | 4 | 1 | 2 | 3 | 3 | 4 | 1 |

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| Serve People | 1 | 1 | 1 | 26 | 18-30 Years | Male | Rural | Post Graduation | Service | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 2 | 5 | 5 | 1 |
| Self Happiness | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 4 | 1 | 5 | 1 | 5 | 1 | 3 | 1 | 4 | 5 | 1 |
| Save Life | 1 | 1 | 2 | 37 | 31-40 Years | Male | Rural | Primary | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 21 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Feeling Good | 1 | 1 | 2 | 24 | 18-30 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Self Happiness | 1 | 2 | 1 | 23 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Fear Removed | 1 | 1 | 1 | 33 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 4 | 1 | 1 | 1 | 5 | 5 | 1 |
| Feeling Good | 2 | 2 | 1 | 26 | 18-30 Years | Male | Rural | Graduation | Job | Married | 4 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 3 | 4 | 1 |
| Save Life | 1 | 1 | 1 | 26 | 18-30 Years | Male | Urban | Graduation | Job | Married | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 2 | 2 | 5 | 1 |
| Serve People | 1 | 2 | 1 | 23 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |

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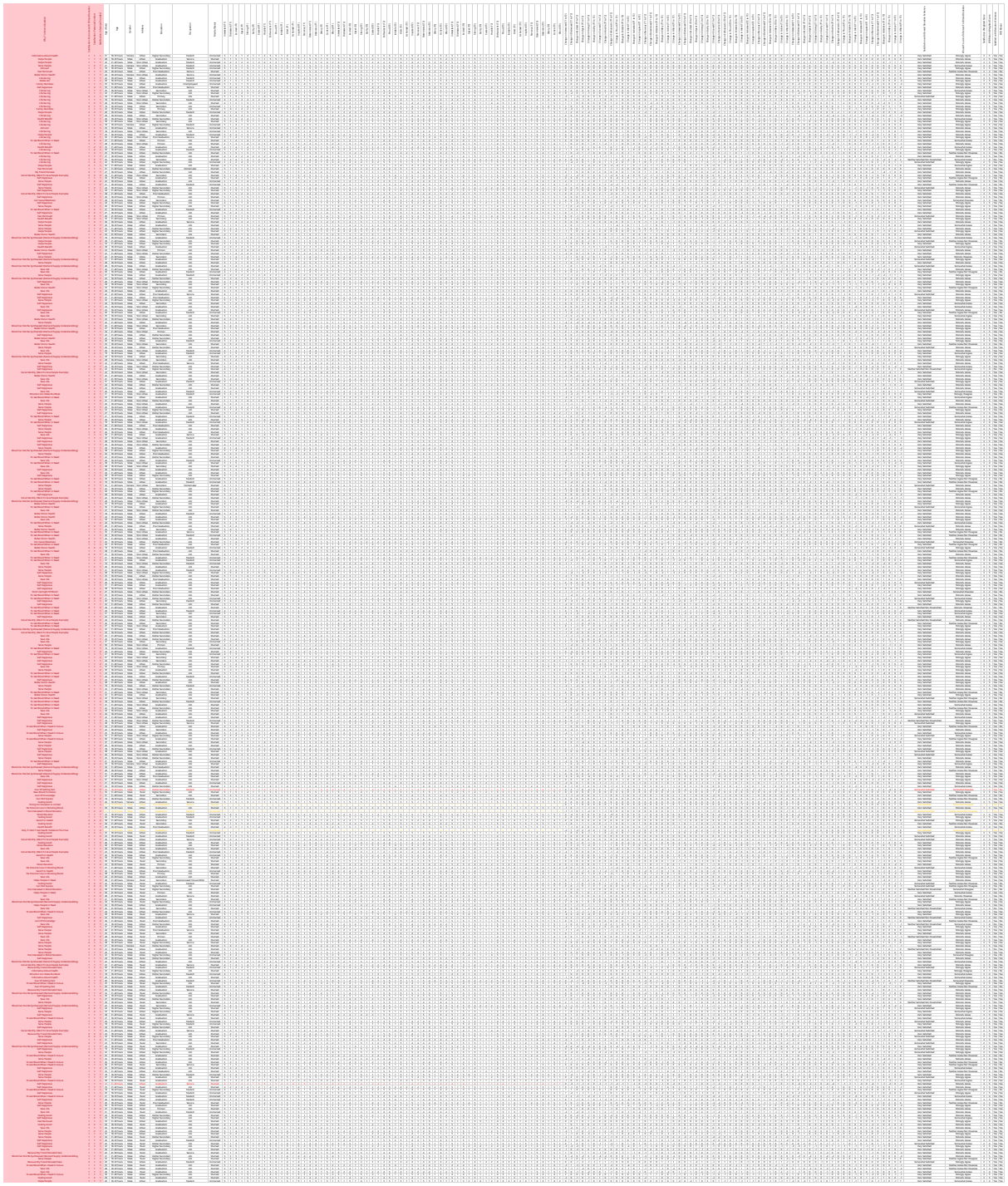
| Serve People | 1 | 1 | 1 | 25 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 2 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 2 | 34 | 31-40 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 5 | 2 | 4 | 1 | 1 | 1 | 5 | 5 | 2 |
| Self Happiness | 1 | 1 | 1 | 20 | 18-30 Years | Male | Rural | Graduation | Student | Unmarried | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 4 | 1 |
| Self Happiness | 2 | 1 | 2 | 22 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 1 | 3 | 1 | 4 | 1 | 2 | 2 | 4 | 4 | 1 |
| Self Happiness | 1 | 1 | 1 | 22 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 4 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 36 | 31-40 Years | Male | Urban | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Because My Friend Donated Here | 1 | 1 | 1 | 42 | 41-50 Years | Male | Rural | Graduation | Service | Married | 4 | 1 | 4 | 1 | 4 | 1 | 3 | 1 | 5 | 4 | 2 |
| Blood Can Not Be Synthesized (Demand Supply Understanddi ng | 1 | 1 | 1 | 31 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 5 | 3 | 5 | 3 | 2 | 1 | 5 | 3 | 5 | 5 | 1 |
| Serve People | 1 | 1 | 1 | 25 | 18-30 Years | Male | Rural | Higher Secondary | Job | Married | 5 | 2 | 4 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |
| Because My Friend Donated Here | 2 | 1 | 2 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 4 | 1 | 4 | 1 | 4 | 2 | 2 | 1 | 4 | 4 | 1 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| To Get Blood When I Need In Future | 1 | 1 | 1 | 25 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 28 | 18-30 Years | Male | Urban | Graduation | Job | Married | 5 | 2 | 5 | 3 | 5 | 1 | 4 | 2 | 3 | 5 | 1 |
| Save Life | 1 | 1 | 1 | 26 | 18-30 Years | Male | Rural | Graduation | Job | Married | 4 | 2 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| To Get Blood When I Need In Future | 1 | 1 | 1 | 36 | 31-40 Years | Male | Urban | Higher Secondary | Job | Married | 3 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 4 | 5 | 1 |
| Feeling Good | 1 | 2 | 1 | 29 | 18-30 Years | Male | Rural | Graduation | Job | Married | 5 | 1 | 5 | 1 | 5 | 1 | 2 | 1 | 5 | 5 | 1 |
| Helps People | 1 | 1 | 1 | 20 | 18-30 Years | Male | Urban | Graduation | Student | Unmarried | 5 | 1 | 5 | 1 | 5 | 1 | 1 | 1 | 5 | 5 | 1 |